INTRODUCTION

Computers and the Internet have transformed the way we live, work and play. Marginalized communities around the world don’t always have adequate access to information and communication technologies (ICT), and increasingly go to public access venues such as libraries, telecenters and cybercafés to use computers and access the Internet in order to meet their information and communication needs.

How can you make venues that offer public access to computers and the Internet actually work to serve the needs of marginalized populations in developing countries? If access to information contributes to improving the quality of life of marginalized sectors of the population? How do you support venues that better enable equitable access and effective use of ICT in support of community development?

This book presents results of a research process that began three years ago to answer some of these questions. During 2007-2009, a group of researchers in 25 countries around the world, led by a team in the Technology & Social Change Group (TASCHA) at the University of Washington Information School, studied libraries, telecenters, and cybercafés in 25 developing countries around the world. While much research has been done about telecenters for development, about libraries and information needs of underserved communities, and, to a lesser degree, about cybercafés and their contribution to community development, the research results summarized in this book constitute the first attempt ever to systematically understand the phenomenon of public access computing across different types of venues such as libraries, telecenters and cybercafés, and across multiple developing countries around the world.

The results are promising: there is a vibrant ecosystem of organizations and initiatives that support public access computing in all the countries we studied. Libraries, telecenters, and cybercafés all play an important role in offering access to, and use of, computers and the Internet, especially to people for whom these resources would otherwise be difficult or impossible to reach. Each type of venue has something special to offer, and the idea of working in closer collaboration with each other is one of our greatest recommendations. When libraries, telecenters, and cybercafés work together to share their specialized knowledge and resources, they can make a huge difference to the well-being of underserved populations.

The role of government in its support for public access computing is also different for each type of public access venue: the State is a key provider of public access computers in public libraries, which are, for the most part, funded by the government (national, regional or local), and provide access to information as their core mission; the addition of computers and the Internet to libraries that are already stretched for resources presents new challenges, and also new opportunities. With telecenters the best role of the State may be as enabler of public access. In addition to ensuring appropriate telecommunications infrastructure to reach marginalized and remote areas, the State can help enable local organizations
to provide effective access to ICT by means of grants, subsidies, supportive regulations, training and networking opportunities, etc. In some cases, the State has also been a direct provider of ICT access through local telecenters, but government-run telecenters are frequently less effective than those run by local organizations (with some notable exceptions). Finally, through incentives, regulation, startup funds, subsidies, etc. the State can be an active *promoter* of cybercafés set up and operated by local entrepreneurs as a business, in many cases a sustainable one. The following figure summarizes the main types of public access computing initiatives, and the role of the State in supporting them:

In the ecosystem of libraries, telecenters and cybercafés, this book offers a picture of public access to information and communication technologies in each of the 25 countries studied, and a comparative analysis of ten topics across all 25 countries. These are conversation starters, as well as pointers for further research informed by this broad-based study. The list of topics in the comparative analysis is not exhaustive, and we invite further analysis using the data collected for this study. The country chapters included in this volume are valuable sources, as are all the detailed country reports prepared by each local team using a common template, all of which are available online.

The book is organized as follows: Part I offers nine chapters with analyses of different themes across all 25 countries, and a chapter with a detailed discussion of the research methods, including the country selection rationale. Part II offers detailed country reports for each one of the countries included in the study. While earlier versions of each one of the papers may have been presented at conferences or published in academic journals, and other analyses have been conducted that are not included in this volume, we bring the most salient of them together here to provide *a unified point of reference on the landscape of public access computing in 25 developing countries around the world.*

**SECTION 1: COMPARATIVE ANALYSIS OF PUBLIC ACCESS TO ICT IN 25 COUNTRIES**

Chapter one offers an overview of the distribution of each type of venue, and a comparison of the strengths and weaknesses of each type of venue and how they complement each other. While public access computing is primarily an urban phenomenon, there are about three times as many cybercafés

*Figure 1. Public access triangle and the effective role of the state*
as there are libraries and telecenters combined. This numerical predominance of cybercafés in urban areas needs to be taken into account when reading the remainder of the book. Chapter two looks at the kinds of people who use libraries, telecenters and cybercafés: users are mostly young people under 35. They generally include both men and women, with some variations across countries and across venues, and almost always users have some formal education, they come from lower and middle-income levels, and they are living in urban areas. Chapter three looks at the importance of the people who help users in public access venues: owners, employees or volunteers that help users identify, find, and use the information they need. We call these intermediaries between people and information “infomediaries,” and we analyze their critical role in the success of the public access venues.

Chapters four and five discuss users’ perceptions of public access venues. When analyzing trust, in chapter four, we describe safety and security, relevance, reputation, and “cool” as factors that affect users perceptions and preferences to visit one venue over another. This is followed, in chapter five, by a discussion of the role of fees for service, and how these fees influence the use of public access computers in the countries we studied. Users’ perceptions of relevance of content, and users’ perceptions of the disposition of the operators to help them, play a far more important role than the existence of user fees. In other words, free access to services does not appear to be a determinant factor driving users to public access computing venues.

Chapter six goes on to analyze the experience of public access computing from a gender perspective, and identifies benefits and barriers that affect women in particular in their use of information and communication technologies. Chapter seven discusses specific challenges libraries faced in terms of broad use of digital technologies, while chapter eight analyzes strategies for understanding and better meeting the information needs of the populations served by public access computing initiatives.

Chapter nine offers a synthesis of factors that contribute to the success of public access computing in the countries we studied. These success factors include (1) understanding and taking care of local needs first; (2) building alliances with other venues; (3) collaborating with other media and community services; (4) strengthening sustainability; and (5) training infomediaries and users in digital literacy.

Finally, chapter ten describes the research methods employed in this large-scale international study. It describes the process to select the 25 countries included, the conceptual framework employed in the study, the data collection tools and methods, the way data was analyzed, and the mechanisms used to strengthen data quality and credibility of findings. We also offer some lessons we learned in conducting large-scale, collaborative research projects of this nature.

SECTION 2: PUBLIC ACCESS ICT IN EACH COUNTRY

Section 2 of this book offers detailed descriptions and analyses of the public access computing landscape in each of the 25 countries studied, grouped by geographic region: Latin America and the Caribbean (including Argentina, Brazil, Costa Rica, Colombia, Dominican Republic, Ecuador, Honduras, and Peru); Asia and Eastern Europe (including Bangladesh, Nepal, Philippines, Malaysia, Indonesia, Kazakhstan, Kyrgyzstan, Mongolia, Moldova, Georgia, and Sri Lanka); and Africa and the Middle East (Algeria, Egypt, Namibia, South Africa, Turkey, and Uganda).

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ENDNOTES

1 Formerly known as Center for Information and Society, CIS.
2 All detailed country reports are available at http://tascha.uw.edu/research/landscape-study/