

# Public libraries connecting people for development: Findings from the Global Impact Study

## *Executive Summary*

Araba Sey, Chris Coward, Chris Rothschild, Melody Clark, and Lucas Koepke

July 2013

## GLOBAL IMPACT STUDY

*The Global Impact Study of Public Access to Information & Communication Technologies* was a five-year project (2007-2012) to generate evidence about the scale, character, and impacts of public access to information and communication technologies. Looking at libraries, telecenters, and cybercafés, the study investigated impact in a number of areas, including Communications & Leisure, Culture & Language, Education, Employment & Income, Governance, and Health.

Implemented by the University of Washington's Technology & Social Change Group (TASCHA), the Global Impact Study was part of *Investigating the Social & Economic Impact of Public Access to Information & Communication Technologies* — a broader CAD\$7.9 million research project supported by Canada's International Development Research Centre (IDRC) and a grant to IDRC from the Bill & Melinda Gates Foundation. Managed by IDRC, this project includes the *Global Impact Study of Public Access to Information & Communication Technologies* (this project) and *The Amy Mahan Research Fellowship Program*, led by Universitat Pompeu Fabra, which aimed to deepen the capacity of emerging scholars with the goal of increasing the quality and quantity of research on public access to ICT produced in developing countries.

## TECHNOLOGY & SOCIAL CHANGE GROUP (TASCHA)

The Technology & Social Change Group (TASCHA) at the University of Washington Information School explores the design, use, and effects of information and communication technologies in communities facing social and economic challenges. With experience in 50 countries, TASCHA brings together a multidisciplinary network of social scientists, engineers, and development practitioners to conduct research, advance knowledge, create public resources, and improve policy and program design. Our purpose? To spark innovation and opportunities for those who need it most.

## CONTACT

Technology & Social Change Group  
University of Washington Information School  
Box 354985  
Seattle, WA 98195

Telephone: +1.206.616.9101  
Email: [tascha@uw.edu](mailto:tascha@uw.edu)  
Web: [tascha.uw.edu](http://tascha.uw.edu)

## ABOUT THE AUTHORS

**Araba Sey** is a Research Assistant Professor at the University of Washington Information School. Dr. Sey served as the Research Lead of the Global Impact Study.

**Chris Coward** is the Principal Scientist and Director of the Technology & Social Change Group. Mr. Coward served as the Principal Investigator of the Global Impact Study.

**Chris Rothschild** is a Research Analyst for the Technology & Social Change Group. Mr. Rothschild managed the survey and inventory activities for the Global Impact Study.

**Melody Clark** is the Communication Manager for the Technology & Social Change Group. Ms. Clark served as the research coordinator for the Global Impact Study.

**Lucas Koepke** is a Data Analyst for the Technology & Social Change Group. Mr. Koepke conducted statistical analysis for the Global Impact Study.

## ACKNOWLEDGEMENTS

This report would not have been possible without the contributions and support of numerous people. Given that the data that this report draws on comes from the Global Impact Study of Public Access to ICTs, a full list of acknowledgements for the study can be found in the final research report of the Global Impact Study, [Connecting people for development: Why public access ICTs matter](#).

Specifically for this report on libraries, the authors would like to thank Arwen Ungar for literature review and analysis, Clare Wolfowitz for editing services, Janet Sawaya and the other Global Libraries Program Officers of the Bill & Melinda Gates Foundation for their valuable feedback, and all of our colleagues at the Technology & Social Change Group.

## COPYRIGHT, LICENSING, DISCLAIMER

Copyright 2013, University of Washington. This content is distributed under a Creative Commons Attribution Share-Alike license. The views, opinions, and findings expressed by the authors of this document do not necessarily state or reflect those of TASCHA, the University of Washington, or the research sponsors.

## RESEARCH SUPPORT

This project would not have been possible without the generous financial support of the sponsors, the **International Development Research Centre (IDRC)** and the **Bill & Melinda Gates Foundation**.

## ABSTRACT

Public libraries play a critical role in extending the benefits of information and communication technologies (ICTs) to a diverse range of people worldwide. However, their ability to contribute to development agendas has come into question in recent times. The *Global Impact Study* was designed to address this debate by generating evidence about the scale, character, and impacts of public access ICTs in multiple countries across different venue types. Using data from Botswana, Chile, and the Philippines, the full report summarizes the study's key findings with a focus on libraries, situating these venues in the context of national development, discussing some disputed issues, and providing recommendations for policymakers, library practitioners, and researchers. The results show that a central impact of public libraries is promoting digital inclusion, information access, and development of ICT skills through technology provision, particularly for marginalized populations and those who face challenges using and benefiting from computers and the internet. The data also suggest a number of library characteristics that are important to users and provide a unique public value, with both users and non-users reporting positive impacts and a willingness to pay to maintain the existence of public libraries.

## SUMMARY

ICTs in libraries provide a critical foundation for digital inclusion & technology access.

## KEYWORDS

libraries, cybercafés, ICTD, ICT4D, digital inclusion, e-Skills, Botswana, Chile, Philippines, public access, e-Inclusion, impact

## RECOMMENDED CITATION

Sey, A., Coward, C., Rothschild, C., Clark, M., and Koepke, L. (2013). *Public libraries connecting people for development: Findings from the Global Impact Study*. Seattle: Technology & Social Change Group, University of Washington Information School.

# Executive Summary

This summary of the full report analyzes the impact of accessing information and communication technologies (ICTs) through public libraries. It is based on data collected as part of a broader project, the *Global Impact Study of Public Access to Information & Communication Technologies*, conducted in eight countries from 2007 to 2012. The initial analysis of the data focused on overall impacts across all venue types, highlighting the most significant distinctions among venues.<sup>1</sup> The full report addresses the same overarching questions, but with a sharper focus on public libraries in three countries – Botswana, Chile, and the Philippines.

## Background

Millions of people around the world rely on public access ICTs in venues such as libraries for computer and internet services. Many of these venues, especially in rural and other underserved areas, are supported by governments and development agencies, based on the rationale that having the skills and means to access computer and internet technology is essential to development in a world increasingly dependent on online resources. However, while in several countries there is ongoing support for existing public access programs, in other quarters, especially among development agencies, interest has waned considerably, largely due to changes in the field of information and communication technologies and development (ICTD), even since the inception of this study in 2007. These changes have raised questions about the effectiveness, or long-term relevance, of public library-based ICT access in socio-economic development strategies. With these queries in mind this library analysis explores three broad questions:

1. What is the impact of public access ICTs *in libraries* on people's lives?
2. How far-reaching are these benefits, and how can this be determined?
3. Do the benefits justify the investments required to provide this access?

Furthermore, in acknowledgement of the existence of a persistent market of public access through cybercafés, the analysis explores a fourth question through a case study focused on Chile:

4. Are there any differences in the uses and impacts of public access ICTs at *public libraries* and at *cybercafés*?

The research design and conclusions of the analysis are summarized below. An overview of highlights from each chapter of the full report is also provided.

## Research design

The research design and the conceptual framework are similar to the analysis for the broader project, with some modifications to adjust to the narrower focus on libraries. The methodology is also shaped by the variability of the information from different data sources. Specifically of relevance to the library analysis:

- The broader project conducted generalized surveys of operators, users and non-users of libraries, cybercafés and telecenters in five countries – Bangladesh, Brazil, Chile, Ghana, and the Philippines. Of

---

<sup>1</sup> Sey, A., Coward, C., Bar, F., Sciadas, G., Rothschild, C., & Koepke, L. (2013). Connecting people for development: Why public access ICTs matter. Seattle: Technology & Social Change Group, University of Washington Information School.

these, Chile had the most substantial number of connected public libraries in the sample, followed distantly by the Philippines.

- A number of other targeted studies were conducted in the same five countries, as well as in Botswana, Lithuania, and South Africa. Two of them provided opportunity to analyze libraries in deeper detail:
  - A general survey of public access ICT operators and users in Botswana *libraries only* that mirrored *some* of the content of the general five-country surveys
  - A cost-benefit survey of users and non-users of *different types of public access ICTs* in Chile

For the library analysis, the best comparisons can be drawn by focusing on Chile, Botswana, and the Philippines — the countries surveyed having the largest numbers of sampled public libraries. For the comparison of libraries and cybercafés, the best comparisons can be drawn by focusing on Chile, with some limited references to the Philippines.

Data analysis therefore followed two approaches:

1. **Between-country analysis: comparing *connected library venues and users* in Botswana, Chile, and the Philippines**

Comparisons involve all three countries or just two, depending on data availability.

2. **Between-venue analysis:**
  - a. comparing *connected library and cybercafé users* in Chile
  - b. comparing cost-benefit data for *library and cybercafé users* in Chile and the Philippines

In Chile, the user and venue survey data for libraries and cybercafés were compared to identify similarities and differences in the setup, operations, uses, and outcomes of these two basic venue types. ***In general, all statements of findings comparing libraries and cybercafés are limited to the Chilean context. (The exception is Chapter 7 on cost-benefit analysis, which includes similar comparisons for the Philippines.)***

### Strengths of research design

- Allows comparisons among three very different public library environments:
  - Chile:* A middle-income country with relatively high internet penetration. With a long history of Gates Foundation investment, the country has continued to make public libraries a priority.
  - Botswana:* A lower-middle income country with low internet penetration. As a recent recipient of a country grant from the Gates Foundation, the library ICT infrastructure was still being established at the time of the surveys.
  - Philippines:* A lower-middle income country with internet penetration midway between Chile and Botswana. The Philippines has had no Gates Foundation investment, and there has been a very uneven commitment to public libraries across the country.
- Allows comparisons between public library and cybercafé venues and users, illuminating differences and similarities between these two venue types and the populations they serve.

### Limitations of research design

- Uneven public library sample size across the three countries, with the Philippines having the smallest number of venues and users.
- Botswana used only certain sections of the user and venue survey instruments, limiting variables available for comparison.
- Survey questions were not all worded explicitly to associate impacts to particular venue types.

## Findings and conclusions

Public libraries, across three diverse countries, are serving a critical role in extending the benefits of information and communication technologies to large swaths of their populations. The analysis makes a strong case that the most significant contribution public libraries make is in their capacity to reach a large cross-section of society, and in particular, those people who are often left out of enjoying access to computers and the internet. This is particularly noticeable when library and cybercafé user profiles are compared. Once in the doors of the public library, these patrons access technology and information, and develop their digital skills, thereby building a foundation for lifelong technology use. Library patrons also experience benefits in numerous areas, from education and employment to communication with friends and family. In some cases a greater proportion of library users reported impacts, in other areas it was cybercafé users. Nevertheless, the data do suggest a number of library characteristics, including the free nature of their services and the prevalence of staff assistance, which are important to many users. The value of public libraries is clearly recognized, with both users and non-users willing to pay to maintain their existence.

### 1. Libraries cater to marginalized populations

Serving marginalized populations is arguably the most fundamental contribution that public libraries make. This comes across most clearly when comparing public library users with their cybercafé counterparts. Overall, library users are younger, less educated, less likely to be employed, more likely to be in poverty, and less likely to have home internet. Moreover, library users tended to be newer internet users and they were more likely to indicate getting help, working with others, or no other option for computers as their main reason for visiting a public access venue. Library users far outweighed cybercafé users in obtaining assistance (by a factor of 3 to 1) and receiving training from staff (1.5 to 1). In all three countries, a larger proportion of female than male library users reported their first use of the computer and internet occurred at a public access venue. Furthermore, the proportions were larger for library users than cybercafé users in Chile. Female library users were also nearly twice as likely to have developed their skills at a public access venue compared to female cybercafé users.

Libraries seem to be effectively serving populations that are at risk of being left behind digitally. That being said, cybercafés are also supporting some of these at-risk populations, and they should not be overlooked in digital inclusion discussions as important venues, particularly in view of their greater numbers and availability as compared to public libraries.

### 2. Libraries open doors to the information society

Digital inclusion—technology access, information access, and development of ICT skills—represents the first-order effect of public access ICTs in libraries. Again, public libraries play a more prominent role than cybercafés along many dimensions, though the strengths of cybercafés cannot be dismissed.

*Technology access:* The top reason for using libraries in all three countries was “no other option for internet access.” Particularly in Chile, a majority of library users reported that their use of ICTs would decrease if public access were no longer available. Conversely, a majority of cybercafé users in Chile reported that their usage level would remain unchanged. Most public library users had their first experience with computers and the internet at a public access venue. The data were similar for cybercafé users.

*Information access and support:* Nearly all Philippines library users, about three quarters of Botswana users, and half of Chilean users indicated that they had visited a public access venue to find specific information. In Chile, the figure was only slightly higher for library users than cybercafé users. What sets library users apart, however, is in seeking staff assistance. While the total figures are low, almost twice as many library users as cybercafé users indicated they ask for assistance most of the time or every time. This suggests that when people have the need for assistance, libraries may be better equipped to respond.

Other differences in what users do with public access ICTs were not as distinct, although library users did appear to be engaged in more “serious” uses than their cybercafé users. Library users were more likely to be seeking

specific information and less likely to be looking for entertainment information. Library users were also less likely to surf the internet, use social networking, and email, and more likely to read the news and blog. On the other hand, equal proportions of library and cybercafé users went to the venue for education information, and cybercafé users were more likely to do word processing.

*Development of ICT skills:* For users in Chile, public access venues had been the most important place for developing their ICT skills. In the Philippines, a nearly equal proportion of users selected either schools or public access venues. In Botswana, library users reported that schools played a more important role in their development of their ICT skills. Compared with cybercafé users, a much larger proportion of library users in Chile reported that public access was the most important place for developing their ICT skills.

### 3. Library users gain impacts in priority domains

There is clear evidence that public library users see positive impacts in their lives from the use of public access ICTs. These impacts are felt in multiple regions, within the priority domains as well as in other areas. The most far-reaching area of socioeconomic impact is in Education. A majority of library users also reported positive impacts in the Culture & Language, Employment & Income, Governance, and Health domains. Furthermore, despite the fact that Chile has a longer history and more extensive system of public libraries, library users in Botswana and the Philippines were much more likely to report positive impacts than those in Chile. It could be that the relative scarcity of connected libraries, as well as the novelty of existing facilities, results in users in Botswana and the Philippines to attach higher value to their connected libraries.

Notably, positive impacts are not limited to library users. Although library users in Chile showed a general tendency to be more engaged in “serious” activities, in most cases, cybercafé users in Chile were equally or only slightly less likely to report positive impacts in the priority domains. There were just a few instances where library users were noticeably more likely to report positive impacts - *financial savings, health, and income*. Similarly, with respect to particular tasks, sometimes library users were more likely to have achieved an outcome; in others, cybercafé users were even or had the upper hand. There was no consistent pattern in this trend.

While gender did not make much difference in impact perceptions, other demographic factors – specifically age, educational level and employment status – did have a differentiating effect. Adults, employed, and more educated users (in both libraries and cybercafés) were almost always more likely to report positive impacts than teenagers, unemployed and less educated users, especially in the priority domains.

### 4. Library users see benefits in Communications & Leisure activities

Research in the field of games indicates that young people can learn useful skills through entertainment activities. Some support for this perspective can be seen in the findings of this study – library users in the Philippines and Chile overwhelmingly stated that doing some activity in the Communications & Leisure domain had improved their ICT skills. A fairly large number of respondents (up to one-third) also reported that email and social networking were of key importance in certain domains, especially for activities in the Culture & Language, Education, and Employment & Income domains.

### 5. User restrictions may deter ICT patronage at public libraries

There was a high tendency for libraries to have a variety of restrictions on user behavior. This was highest across the board in the Philippines, followed by Chile and least likely for libraries in Botswana. In both Botswana and the Philippines, library operators were more likely to say that restrictions discouraged or made no difference in their user traffic, while in Chile there was a higher tendency to say that restrictions attracted users to the venue. Not surprisingly, library operators in the country with the highest incidence of restrictions – the Philippines – were also more likely to say that restrictions discouraged use of the venue (more than twice as much as Chile and Botswana). Conversely, a larger proportion of cybercafés did not have restrictions on users – while 3% of libraries had no restrictions, 39% of cybercafés indicated they did not have use restrictions. Libraries were also more likely

to have filters blocking offensive content (89%) compared to cybercafés (55%). Libraries in Chile were less likely than their cybercafé counterparts to allow sharing (62% vs. 82%). However similar proportions of libraries (65%) and cybercafés (69%) felt that the absence of restrictions on use was important for attracting users.

## 6. Libraries have a unique public value

### *Free services*

Public libraries are clearly distinct from commercial public access venues in that their services are essentially free to the public. The study findings showed unsurprisingly that libraries were much more likely to offer free services than cybercafés. This was particularly true with internet use on computers (provided by 98% of libraries vs. 3% of cybercafés), in-house training (70% vs. 3%), online training (69% vs. 3%), and eGovernment services (64% vs. 3%). There were very few instances of free services at cybercafés – the only noticeable area was in job placement services (10% of cybercafés). Libraries in Botswana and Chile were more likely to provide free services compared to the Philippines. There were fewer free services in general in Philippine libraries as well as a substantially lower incidence of free in-house training for users (6% vs. 78% for Botswana and 70% for Chile). On average, the most common type of free services across countries were internet usage on computers (95%), in-house training (59%), and eGovernment services (54%).

User responses about the impact of public access ICT use on their income and financial savings suggests that the availability of free services is valuable and makes ICT access attainable for some populations. The gap between student users in the area of financial savings was especially striking – almost half of student library users (41%) perceived a positive impact here, compared with less than one-fifth of student cybercafé users (19%). Although users of cybercafés are clearly willing to pay fees for computer and internet use, the survey respondents were also more likely to report negative impacts of public access use on their income or on their financial savings (especially students and unemployed cybercafé users). Almost 15% of students in cybercafés reported negative impacts on income, but this proportion drops to 0% for students using libraries. Amongst unemployed cybercafé users, 30% reported negative impacts on their financial savings, but this number drops to just 8% for unemployed library users.

### *Staff support*

Public libraries seem to be well positioned to serve users who need support for ICT use. The data show that libraries were more committed to providing their staff with different types of training (technical, information retrieval, customer service) targeted at working in a public access venue and for the purpose of supporting users – all libraries provide training compared to 51% of cybercafés. Although both libraries and cybercafés had similar levels of staff with requisite technical and information-retrieval skills to assist users, library respondents tended to utilize training and support services more often than cybercafé users. This was particularly apparent in assistance with online activities (64% vs. 19%) and training provided by staff (51% vs. 35%).

### *Accessibility*

Overall, public libraries tended to be more accessible than cybercafés to people with physical disabilities. A greater proportion of Chilean libraries had wheelchair accessibility (66% vs. 36%) and workstations to accommodate wheelchairs (46% vs. 25%). In addition, while 13% of libraries offered hardware or software for people with disabilities, the same was true for only 3% of cybercafés. However, while the majority of libraries in Botswana (70%) and Chile (66%) had good accessibility for wheelchairs, libraries in the Philippines were considerably less accessible (39% had good accessibility). Botswana and Chilean libraries also had a far greater proportion of workstations that could accommodate wheelchairs (67% and 46%, respectively) than in the Philippines (11%). Special hardware or software for those with disabilities was not common: 13% in Chile, 11% in the Philippines, and none in Botswana.

### *Value of public libraries*

The benefit-cost analysis in Chile and the Philippines shows that both library users and non-users attach significant value to the existence of libraries, more so than other types of public access venues. Library users in Chile and the Philippines were spending respectively \$45 and \$49 annually to reach a connected library, in

contrast to cybercafé users who were paying \$33 in Chile and \$34 in the Philippines. The higher travel costs for libraries indicate higher user valuation of benefits.

As a proxy for public value, the views of non-users of public access can provide useful insights into national perceptions of libraries and other public access venues. The data show that people who do not use libraries still appreciate the value of public access services in libraries and are willing to pay for others to have access. However, there was a clear difference between Chile and the Philippines. In Chile, non-users were willing to pay more to keep libraries from closing (\$14), and less to keep cybercafés from closing (\$12). The case study in Chile only reinforced this finding: on average, respondents (users and non-users) were willing to pay \$49 to prevent the reduction of hours of libraries and just \$7 for cybercafés. Conversely, non-users in the Philippines were willing to pay more to keep cybercafés from closing (\$64 compared to \$51 for libraries).

## 7. Public libraries share some similarities with other types of public access ICT providers

The three countries covered in the study have different economic profiles and contexts for public access ICTs in libraries. It is reasonable to expect that countries with more established national library systems, more connected libraries, and more significant investments directed at connectivity in libraries, will have better facilities, resources and services. In addition, it could be argued that because of their non-commercial orientation, libraries would provide a different environment and quality of service to users compared to cybercafés. The data provide some support for this, as noted in the above section on the unique value of public access. But there are some deviations, showing libraries and cybercafés to share some similar features:

### *Physical infrastructure*

Most of the connected libraries in the study were located in busy, high traffic areas, particularly in Botswana and the Philippines. Chile was the only country that had a fairly balanced distribution of connected libraries (as well as cybercafés) in average and busy areas, and a few (14% for libraries, 10% for cybercafés) in isolated areas. It is not clear whether this is an artifact of the survey sampling strategies, however, assuming this is accurate, it implies that populations in areas of lower economic and human traffic may have to travel further, and possibly incur higher costs to use public access ICTs, whether at a library or a cybercafé.

### *Uses*

While there were some notable distinctions between user behavior and perceived impacts at libraries and cybercafés, there were also several areas in which they were similar or the differences were so small as to be negligible. For example, a similar proportion of users in both venue types indicated they went to the venue for education information (51% in libraries, 50% in cybercafés), and there were no substantial differences in the other computer-related activities they engaged in. Although library users were more likely than cybercafé users to be seeking specific information (51% vs. 46%), there was little difference in the success rate of library and cybercafé users in finding the information they were seeking, or using that information.

### *Impacts*

The general impact perceptions of library and cybercafé users were also surprisingly similar in several respects. While library users were generally more likely than cybercafé users to report positive impacts in the priority domains, the differences were often small. Fairly large differences were recorded for *financial savings* (41% for library users vs. 24% for cybercafé users), *health* (45% vs. 28%), and *income* (38% vs. 29%). Other differences were in the region of 1%-8%. When the analysis was focused only on domain users in the last 12 months, the differences between users of the two venue types became even smaller or were eliminated altogether (except in the case of *income*).

Comparing goal achievement for library and cybercafé users in Chile produced mixed results. For example, in the activities under the Employment & Income domain, library users were slightly more likely to achieve an outcome. However cybercafés edged out libraries when it came to training courses – 93% of cybercafé users who took a training course felt that the course had improved their work-related skills, compared to 85% of library users. Similarly in the Communications & Leisure, Culture & Language, Education, and Health domains, library users were more successful in some tasks and cybercafé users were more successful in others; for example, library users



were slightly more likely to say they were better able to manage an illness, while cybercafé users were more likely to report that they were successful in obtaining an online health service. Under Governance, cybercafé users were equally or slightly more likely to achieve an outcome. Essentially, then, although some variations exist, both libraries and cybercafés in Chile can be said to be providing useful services to their patrons.

Overall, the evidence shows, public libraries are playing an important, and often unique, role by providing public access to ICTs. In analyzing library venues and users across three countries, the study illuminated numerous areas where public access ICTs has made important differences in people's lives. These differences come into stronger relief when library users are compared with cybercafé users, though the similarities are significant as well.

## Recommendations

The findings presented in the full report illuminate many facets about when, how, and why impacts occur, suggesting a number of possible courses of action for advancing the future role of public libraries. For policy makers and practitioners, these recommendations are intended to provide a framework for thinking about public libraries, rather than to advocate for a set of specific actions in particular circumstances. In most cases, policy makers and practitioners will be weighing different priorities, goals, and conditions on the ground: there is no one-size-fits-all scenario.

### Government and donor organizations

Governments, multilateral agencies, foundations, and other public and private organizations are the primary supporters of the public access model, both for public libraries and other venue types. The following recommendations seek to inform the deliberations, decisions, and implementation strategies of organizations across this spectrum.

#### 1. Support the provision of public access ICTs in libraries where they exist.

Public libraries are a valuable resource for countries worldwide. This research finds compelling evidence that public libraries are filling multiple needs for all population groups. This is particularly the case for disadvantaged groups and those who need assistance, such as people who are novices to information technology. Furthermore, the research shows that public libraries have a number of features (e.g., assistance from a librarian and free services) that are particularly valued by these groups. Cybercafés do not have the same tendencies, therefore, even where cybercafés exist, public libraries can provide additional value.

#### 2. Explore partnerships in other cases.

Public libraries are not ubiquitous, and even in countries with large numbers of libraries, they are not necessarily uniformly distributed and within easy reach of all members of society. Other forms of public access far outnumber public libraries in most countries, so that one element of a strategic approach should be leveraging their ubiquity. The findings of the presented in the full report show that all venue types have value. Combining the information expertise of public libraries with the greater reach of other entities in such countries is a potentially powerful proposition. This will likely require creative approaches. In the case of other public entities, such as post offices or other government buildings, the partnership possibilities may be more straightforward. Partnering with cybercafés may also be a viable option in many countries, for example through cybercafé associations. Partnering with public libraries could be a way to bring a social orientation to the activities of cybercafés.

#### 3. Provide, and publicize, domain-specific information and services through public access venues.

Numerous efforts in recent years have focused on developing and distributing domain-specific ICT applications, in health, agriculture, education, and other areas. Even for the many users of the mobile phone platform, large gaps exist in awareness and skills needed to use these applications, services, and online

resources. The evidence shows that public libraries are important for users with needs in these domains. It also shows that many people may be unaware of such resources, even though they may be offered at the venues. Public libraries can play an important function not only in delivering domain-specific resources but also in actively popularizing those resources, whether online or offline. Such efforts are made more feasible since public libraries are typically part of large networks.

#### 4. Embrace communications and non-instrumental uses.

The hours that patrons devote to communications, social networking, and other “non-productive” uses of technology should not be considered detrimental, but rather included among the objectives served by public libraries. Many public libraries place restrictions on these uses, whether because of resource constraints or unduly narrow assumptions about what constitutes productive use of ICTs. This research showed that these uses in fact build skills and support instrumental aims. Increasingly, people access news resources and other essential information through social media applications rather than traditional websites. But even when they do not produce highly desirable or sanctioned outcomes, supporters may want to consider that such activities constitute behaviors that are as legitimate as any other “serious” activity.

#### 5. Assess performance against realistic measures.

The performance of libraries should be assessed based on a well-grounded appreciation of what public access ICTs can and cannot do. It is important to acknowledge the important contribution public access ICTs at libraries make at the most basic level: providing computer and internet access and fostering the development of basic digital skills. This project’s findings suggest that it is important to re-think how to assess public access ICT uses, especially for categories of use that are episodic rather than routine. Many early public access initiatives were judged failures because users were not engaged in domains of Health, Governance, and the like, at the activity levels hoped for by the planners. However, different people have different needs, and their needs vary at different times in their lives. The value of public access ICTs in these priority areas is that *the libraries are available when individual needs arise*.

## Practitioners

Public librarians operate on the front lines of providing public access ICTs to communities worldwide. Their capabilities and modes of service delivery, along with the affordances they enable, can directly influence how users and the general public use computers and the internet, and thus the level of impacts.

#### 1. Adopt a flexible approach to rules.

Some limits on users’ behavior are necessary to ensure respect for people and property at a public library, and to promote library objectives. Public library rules often target issues such as: noise levels; use of particular computer software; performing certain actions on computers (such as downloading material from the internet or social networking); the amount of time spent on a computer; use of mobile technology; and others. However, some restrictions, while well-intentioned, can inhibit some of the behaviors that are most likely to lead to development outcomes. The recommendation is to be sensitive to context — the needs of users, societal trends, new knowledge regarding useful activities — while making adjustments to policies as appropriate to fit the situation.

#### 2. Embrace mobile phone services.

The study results reveal that the vast majority of public access users are also mobile phone owners. Clearly, mobile phones currently do not constitute a threat to the relevance of public access ICTs in libraries. To the contrary, mobile telephony presents opportunities for libraries to leverage or enhance their services. There are other forms of use that if allowed, could heighten the quality of a user’s experience in the library — such as printing directly from phones, accessing wireless networks on phones, reserving a computer via SMS, and charging phones.

### 3. Consider the effect of fees.

Evidence from this study shows that fees may have a detrimental effect, especially for groups with fewer means, such as students. Indeed, people's willingness to pay for public access ICTs may in some cases entail the sacrifice of other needs, and this may not be ideal. A strong indication of this was seen in the fact that cybercafé users, especially students and the unemployed, were several times more likely to report a negative impact on their finances. Thus, whereas it may be justifiable to institute fees for public access ICTs, such a decision should take into account the socioeconomic status of any priority groups of users or potential users, who may be unable to pay for access, as well as the range of alternative ICT access options.

### 4. Make users aware of content availability in priority domains.

The study shows that some users do not engage in a particular activity at a public library because it does not occur to them to do so. This suggests that they may not be aware of the relevant resources, or they perhaps assume that the venue has no resources in that area. Practitioners should ensure that they publicize the types of resources they have available, so that, as the occasion arises, users would have public libraries in mind as an option for addressing specific needs.

## Researchers

A primary aim of this project is to reinvigorate debate about the value of public access ICTs and to spur new research. Accordingly, the project adopted the principle of open research and open data. These recommendations include specific topics for possible exploration, as well as other opportunities and reflections on new research directions.

### 1. Conduct deeper analysis on questions raised by the full report.

The project team was inevitably limited in the range of questions analyzed in this study, leaving a plethora of other questions for future research. Researchers can make use of the inventory and survey data made available by this project, to enable analyses such as:

- Uncovering the conditions under which impact occurs, linking user outcomes to such variables as a public library's technical infrastructure, rules, knowledge workers, and location
- Further exploring specific user populations, such as youth, women, unemployed, etc.
- Examining which services marginalized groups rely on more
- Conducting geographic information systems (GIS) analysis, using the project's inventory of 65,000+ geo-located venues

Research can also be designed to implement and assess the effects of specific interventions, such as:

- Different combinations of rules, and their effect on user behavior and impacts
- Social media strategies to promote library services and resources in the impact domains
- Services for mobile phones, and their effect on attracting users and user behavior
- Space configurations that encourage collaborative technology use, their effect on attracting new users and the types of uses people engage in, as well as the effect on other library users
- Collaborations between libraries and cybercafés around content and services, training, government programs, and other areas.

### 2. Build on methodological lessons.

Much work remains to be done to develop and strengthen methodologies for conceptualizing, identifying, and measuring public access ICT impacts. In pursuing this, the project team offers the following considerations:

- Country context matters enormously, in particular regarding overall connectivity, presence of different models of public access, extent of public access use (current and historical), and public

policies. These differences influence the configuration of the public access landscape, which in turn complicates the pathways to impact. This variability of context needs to be taken into account when attempting to produce generalizable findings.

- Public libraries exist within an ecology of information and communication resources and practices. Public library users and non-users have a range of tools and resources at their disposal for connecting to their immediate networks and to the rest of the world — including print and other mass media, desktop computers, mobile phones, and other human beings. Rather than primarily seeking to measure “impacts,” a more productive approach to evaluating the social or economic value of public access ICTS in libraries could be to explore how public libraries fit into this information ecology.
- In developing impact indicators, care should be taken to ensure that libraries are not being assessed in terms of unrealistic objectives. Researchers have a responsibility to help develop appropriate measures of the effectiveness of public access ICTs, and to engage with policymakers, development agents, and practitioners to moderate unrealistic expectations.

## Chapter highlights

This section presents snapshots of the main research findings as presented in Chapters 3-7 of the full report.

### Chapter 3: Public Access at Libraries: Landscape and Realities

This chapter presents data collected from library and cybercafé operators in Botswana, Chile, and the Philippines. The data show that the landscape of public access is diverse, with variations at the venue level as well as between countries.

#### Between-country analysis: Botswana, Chile, Philippines

- *Location:* In Botswana and the Philippines, libraries were mostly located in busy, high-traffic areas (73% and 72%). In Chile, libraries were more equally distributed between average and busy areas (42% and 44%). A very small proportion of connected public libraries were located in isolated areas in Chile, and none in the other two countries.
- *Physical condition:* Most libraries in each of the three countries were described as being in “average” condition (Botswana 73%, Philippines 61%, and Chile 69%).
- *Accessibility:* Fifty-four percent of libraries had good wheelchair accessibility, though this was fairly low in the Philippines (39%). Other services or features catering to people with disabilities were evident in relatively few libraries: 8% had an employee who can help people with hearing disabilities; 9% provided special keyboards and mice; 14% provided speaking software for people with vision disabilities.
- *Computer availability:* Philippine libraries had the highest average number of computers available for public use (20 computers), followed by Botswana (8 computers), and Chile (7 computers). Overall, however, 72% of libraries — and fully 93% in Botswana — reported that they do not have enough computers to meet user demand.
- *Internet speed:* Most libraries in all three countries reported that their internet speeds were sufficient to meet user needs (Botswana 73%, Philippines 83%, and Chile 71%).
- *Free services:* Overall, the most common types of free services were: internet use (95%); in-house training (59%); and eGovernment services (54%). Free services were much less common in the Philippines: for example, free in-house training for users was available in 6% of Philippine libraries, compared to 78% in Botswana and 70% in Chile.
- *Staff training:* Overall, most libraries (81%) had provided staff with training relevant to running a public access venue. The proportions were higher in Botswana and Chile (both 86%) than in the Philippines (61%).

- *Staff assistance*: The most common overall reasons for seeking staff assistance were personal communications (41%), problems with internet connectivity (35%), and searching for educational information (32%). In Botswana and Chile, personal communications assistance was the most common reason (60% and 45%), while in the Philippines internet connectivity assistance was most common (50%).
- *Restrictions*: Libraries tended to place restrictions on a variety of user behaviors, especially viewing pornography (93%), downloading software (53%), downloading music/videos (47%), and gaming (31%). These restrictions were consistently highest in the Philippines (100%, 89%, 89%, and 94%); library operators in the Philippines were much more likely to report that the restrictions discouraged user traffic than in Botswana or Chile (38%, vs. 8% and 11%). Libraries in Chile had a higher tendency than those in Botswana or the Philippines to report that restrictions actually attracted users (50%, vs. 17% and 25%).
- *User traffic*: Average daily user traffic was higher in Chile (63) than in Botswana (47) or the Philippines (48). Chile and Botswana had on average about 100 unique users per week, compared to only 8 in the Philippines. Library traffic was highest during the weekend in all countries.

#### Between-venue analysis: Chile

- *Location*: There were only slight differences between libraries and cybercafés, with a higher percentage of libraries being located in average areas (42% vs. 40% for cybercafés) and a lower percentage in busy areas (44% vs. 50%).
- *Physical condition*: Libraries were in slightly better condition than cybercafés, with 26% vs. 13% reporting “new/remodeled” condition, and 69% vs. 78% in “average” condition.
- *Accessibility*: Disability access was consistently higher in libraries than in cybercafés: good wheelchair access at 66% vs. 24%; speaking software at 19% vs. 4%; special keyboards and mice at 12% vs. 3%.
- *Computer availability*: Libraries had, on average, fewer computers than cybercafés (7 vs. 12). Almost 70% of the libraries reported that they did not have enough computers, compared to only 37% of cybercafés.
- *Internet speed*: Similar proportions of libraries (71%) and cybercafés (78%) reported adequate internet speed for user needs.
- *Free services*: Unlike libraries, cybercafés offered few free services, with job placement being the only noticeable exception – about 18 of cybercafés stated that they offer free job placement services.
- *Staff training*: Over three-quarters (86%) of libraries provided staff with training on public access service provision, compared to less than half (42%) of cybercafés.
- *Staff assistance*: There was not much difference in the most common types of assistance users requested from venue staff in libraries and cybercafés: help with personal communication activities (45% for libraries and 39% for cybercafés), software problems (28% vs. 35%) and internet connectivity problems (28% vs. 21%).
- *Restrictions*: Libraries reported a much higher tendency than cybercafés to impose restrictions on computer use: 97% had some restrictions, compared to 61% of cybercafés. Libraries were also much more likely to impose specific restrictions including: viewing pornography (95% vs. 61%), for downloading software (55% vs. 14%), downloading music/videos (45% vs. 23%), and gaming (20% vs. 6%).
- *User traffic*: The average daily user traffic was slightly lower for libraries than for cybercafés (63 vs. 66 users). However, cybercafés had substantially more unique users per week (158 vs. 101). In contrast to libraries, cybercafé traffic was highest on weekdays rather than weekends.

## Chapter 4: Profile of Library Users

This chapter presents data collected from library and cybercafé users in Botswana, Chile, and the Philippines. Differences between the two types of venue users in Chile were mostly not dramatic. However public libraries stand out in serving marginalized populations. This is arguably the most fundamental contribution that public libraries make to the development agenda.

#### Between-country analysis: Botswana, Chile, Philippines

- *Age*: Library users were young: 81% were under 34. User ages were more evenly distributed in Chile than in Botswana or the Philippines.

- *Education*: Library users in Chile were slightly less educated than those in the other countries. A quarter (26%) of Chilean users had only a primary education, compared to 12% in Botswana, and 4% in the Philippines.
- *Occupation*: Students made up the highest proportion of users in Chile and Botswana (40% and 50%). The data on occupation from users in the Philippines were unreliable and could not be analyzed.
- *Income*: Individual income levels varied dramatically between countries. Chile had a higher proportion of library users above poverty (50%) than the Philippines (22%).<sup>2</sup> Total household income also showed large differences: 97% of Chile library users reported household incomes above the national household poverty line, compared to 89% in Botswana and 53% in the Philippines.
- *Household access to ICTs*: Home internet penetration was higher in Chile (30%) and the Philippines (26%) than in Botswana (13%).
- *ICT skill level*: Users in the Philippine user had lower skills (56% with fair or poor ability) than Chilean and Botswana users (31% and 29%). The majority of library users in Chile and the Philippines first used the internet more than three years ago (77% and 81%), much higher than in Botswana (51%).
- *Reasons for using public access*: The top reason for using libraries in all three countries was “no other option for internet access” (Botswana 29%, Philippines 31%, Chile 39%). For Botswana and Chile, the second most common reason was “better equipment than home or work” (27% and 16%).
- *Frequency of use*: Most library users visited the venue at least once a week (Botswana 87%, Philippines 83%, and Chile 74%).
- *Distance from venue*: A plurality of library users across all countries lived less than 1km from the venue (Botswana 43%, Philippines 36%, and Chile 56%).
- *Activities and services*: Browsing the internet and email were the most common activities in libraries in Chile (84% and 75%) and the Philippines (79% and 68%). Word processing was more popular in the Philippines (66%) than in Chile (34%).
- *Staff assistance*: Chile library users were more likely to seek assistance with job placement than Philippine users (61% vs. 46%). Philippine users were more likely to seek document preparation support (67% vs. 58%).

#### Between-venue analysis: Chile

- *Age*: Library users were younger than cybercafé users: 37% under 20 years of age vs. 26% for cybercafés.
- *Education*: Library users were also less educated (26% with only primary education) than cybercafé users (12% with primary education).
- *Occupation*: Library users were less likely to be employed than cybercafé users (35% vs. 48%).
- *Income*: Library users were more likely than cybercafé users to have individual income levels below the national poverty line (50% vs. 37%).
- *Household access to ICTs*: Home internet was higher among cybercafé users (40%) than library users (30%).
- *ICT skill level*: Library users reported slightly lower computer skills than cybercafé users (31% vs. 23% reporting fair or poor ability).
- *Reasons for using public access*: There was not much difference between library and cybercafé users. For both, the main reason for using public access ICTs was “no other option for internet access” (39% for library users and 47% for cybercafé users). This was followed by “better equipment than home or work” (16% for libraries and 17% for cybercafés). Slightly larger proportions of library users indicated that their main reason was no other option for computer access. (13% vs. 8%), getting help, (9% vs. 4%), or working with others (9% vs. 7%).

---

<sup>2</sup> Individual income data was not collected in Botswana.

- *Frequency of use:* Library users were more frequent users of public access ICTs. Both weekly (74% vs. 68%) and daily (36% vs. 26%) visitation were higher for library users than cybercafé users.
- *Distance from venue:* There was no difference in distance for library users and cybercafé users.
- *Activities and services:* Library respondents were much more likely than cybercafé users to utilize training and support provided by the venue – especially assistance with online activities (64% vs. 19%) and training provided by staff (51% vs. 35%). Apart from this, there were few substantial differences in the computer activities performed by library and cybercafé users. Library users were also more likely to read the news (46% vs. 36%), blog (19% vs. 15%), and listen to or download music (43% vs. 41%). Conversely, cybercafé users were slightly more likely to surf the internet (86% vs. 84%), use social networking (79% vs. 76%), email (80% vs. 75%), and use word processing (38% vs. 34%).
- *Staff assistance:* Chile library users were far more likely to seek training and support services than cybercafé users: document preparation and support, 58% vs. 46%; job placement, 61% vs. 48%; online activities such as eBanking, 64% vs. 19%; training from staff, 51% vs. 35%.

## Chapter 5: Digital Inclusion: Opening Doors

This chapter presents data collected from library and cybercafé users in Botswana, Chile and the Philippines. First-order impacts are observed in the area of digital inclusion — expanding access to technology and information resources, and supporting the development of ICT skills.

### Between-country analysis: Botswana, Chile, Philippines

- *Home access:* Less than a third of library users had home internet access, across all three countries (Botswana 13%, Philippines 26%, and Chile 30%).
- *First use:* A majority of library users had their first internet use at a public access venue (Botswana 75%, Philippines 56%, and Chile 59%). For first computer use, the figures were slightly lower (Chile 53%, the Philippines 47%).<sup>3</sup>
- *Development of ICT skills:* For library users, the importance of public access ICTs varied across countries. In terms of where users developed their internet skills, public access (40%) was more important than school (24%) and home access (20%) in Chile. In Botswana, school access (46%) was more important than public access (28%) and home access (12%). And in the Philippines, nearly equal proportions cited school access (36%) and public access (35%), over home access (15%). For computer skills, Chile respondents indicated that schools were most important (35%, vs. 24% for public access and 24% for home); while in the Philippines, schools played a more prominent role than public access or home access (43%, 24%, 22%).
- *Impact of losing access:* Library users reported that their use of computers and the internet would decrease, if public access ICTs were no longer available (Philippines 38%, Chile 62%).
- *Gender:* Libraries proved to be playing an important role serving females for whom public access ICTs had been an important resource. Far greater proportions of female than male public library users had their first computer experience in a public access venue (Philippines, 54% vs. 39%; Chile, 62% vs. 44%). The same trend was seen for first internet experience in the Philippines (61% vs. 52%) and Chile (67% vs. 49%). In Botswana, however, nearly equal proportions of females and males had had their first internet experience at a public access venue (74% vs. 76%).
- *Information seeking:* Library users in all countries had high response rates for seeking specific information on the day they were surveyed (Botswana 70%, Philippines 90%, Chile 51%). The most common information searched for in libraries, across all countries, was education-related (Botswana 50%, Philippines 84%, Chile 51%).

---

<sup>3</sup> Data on first computer use was not collected in Botswana.

- *Infomediation*: Seeking assistance was rarely the *main* reason for visiting a venue (between 3% and 7% across countries), but library users did rely on staff assistance for some of their needs. The proportion of respondents who said they seek assistance at least “sometimes” was 41% in Chile and 28% in the Philippines.<sup>4</sup>
- *Types of assistance*: Across countries, the most common types of staff assistance required by users were related to problems with internet connectivity (40%–51%) and computer hardware and software (11%–26%). Other tasks received less than 5% of user responses.

#### Between-venue analysis: Chile

- *Home access*: Home internet access was less prevalent among library users (30%) than cybercafé users (40%).
- *First use*: In Chile, a greater proportion of library than cybercafé users had their first computer use (53% vs. 43%) and internet use (59% vs. 52%) at a public access venue.
- *Development of ICT skills*: Public access ICTs played a far more important role for public library users than for cybercafé users in developing internet skills (40% vs. 27%) and computer skills (35% vs. 20%).
- *Impact of losing access*: Higher proportions of library users (62%) than cybercafé users (38%) reported that their use of computers and the internet would decrease if public access ICTs were no longer available.
- *Gender*: Female library users were more likely than female cybercafé users to have depended on public access ICTs for their first computer and internet use. In addition, greater proportions of female than male public library users had their first computer (62% vs. 44%) and internet (67% vs. 49%) experience in a public access venue. For cybercafé users, nearly equal proportions of females and males had their first computer and internet experience in a public access venue (females 44%, males 42% for computers; females 50%, males 54% for internet).
- *Information seeking*: Library users were slightly more likely than cybercafé users to be seeking specific information (51% vs. 46%). A smaller proportion of library users sought entertainment information (34% vs. 56%).
- *Infomediation*: This proportion users seeking staff assistance at least “sometimes” was higher for library users (41%) than cybercafé users (29%).
- *Types of assistance*: There was not a substantial difference in the most common types of assistance library and cybercafé users sought from venue staff – internet connectivity (40% for library users, 41% for cybercafé users); computer hardware (20% for libraries, 16% for cybercafé users) and computer software problems (20% for library users, 25% for cybercafé users).

## Chapter 6: Social and Economic Impacts

This chapter presents data collected from library and cybercafé users in Botswana, Chile, and the Philippines. Social and economic impacts are observed in the domains of Communications & Leisure, Culture & Language, Education, Employment & Income, Governance, and Health. There were both differences and similarities in the impact perceptions of library and cybercafé users in Chile.

### GENERAL IMPACTS: USER PERCEPTIONS

#### Between-country analysis: Botswana, Chile, Philippines

- Overall, the categories *education* (90%), *communication with family & friends* (90%), *pursuing leisure activities* (85%), and *time savings* (79%) topped the list of positive impacts reported by library users.

---

<sup>4</sup> Data on infomediation was not collected in Botswana.



- A majority of library users also reported positive impacts in a number of priority areas: *access to government information & services* (67%), *access to employability resources* (63%), *local language & cultural activities* (60%), and *health* (52%).
- The trend is generally consistent across countries, with *income* showing the least variation (37% to 43%).
- Library users in Botswana and the Philippines were more likely than those in Chile to report positive impacts.

#### Between-venue analysis: Chile

- *Education* ranked first for library users (91%), but fourth for cybercafé users (83%).
- Library users were more likely than cybercafé users to report positive impacts in non-leisure fields: *financial savings* (41% vs. 24%); *health* (45% vs. 28%); and *income* (38% vs. 29%).
- Cybercafé users were slightly more likely to report positive impacts on *sending/receiving remittances* (28% vs. 24%).

### USAGE PATTERNS AND IMPACTS

#### Between-country analysis: Botswana, Chile, Philippines

- There were pronounced differences in the positive impact perceptions of people who had engaged in a particular domain of impact and those who had not. Domain users were more likely to report positive impacts in the domain they had engaged in. This was especially evident in the non-leisure domains: *income* at 61%, compared to 38% of users overall; *health* at 69% compared to 52%; and *government information & services* at 85%, compared to 67%. This pattern held for each country.
- The non-users of a particular domain (at library venues) also reported positive impacts in a number of areas, ranging from a high of 88% (for *education*) to the lowest, 22% (for *income*).
- Among these domain non-users, positive impacts were most likely in the priority domain categories. Those in Chile were most likely to report positive impacts in the Communications & Leisure domain.
- The most common reason for non-use of a domain or category was “didn’t have the need” (between 31% and 47% of library users).

#### Between-venue analysis: Chile

- There was little difference between library and cybercafé users in most categories: *local language & cultural activities* (both 75%), *education* (93% vs. 94%), and *government information & services* (80% vs. 78%). An exception was *income* (57% vs. 44%).
- Domain non-users in libraries were more likely than those in cybercafés to report positive impacts in all categories, with the exception of *pursuing leisure activities*, *access to employability resources*, and *sending or receiving remittances*.

### IMPACTS BY USER POPULATION

#### Between-country analysis: Botswana, Chile, Philippines

##### Gender

- Among library users overall, few differences emerged between male and female users in terms of perceived positive impact.
- In Chile, higher proportions of male users reported positive impacts in several areas: *income* (43% vs. 34% for female users); *access to employability resources* (55% vs. 48%); and *meeting new people* (82% vs. 69%). Slightly higher proportions of female users reported positive impacts on *health* (48%) compared with male users (41%).

##### Age

- Adult users were more likely than teenage users to report positive impacts in all categories except *pursuing interests & hobbies* and *meeting new people*. The differences were largest for *income* (57% vs. 44%), *employment resources* (73% vs. 46%), and *sending or receiving remittances* (34% vs. 21%).

### Education

- Perceptions of positive impact were more prevalent at higher levels of education for library users, across all countries and impact categories.
- For users with a tertiary education, the proportion reporting positive impact on *income* was higher in Chile (62%) than Botswana (41%). However, in *access to employability resources*, library users in Botswana were more likely than those in Chile to report positive impacts, across all educational levels.

### Employment status

- Employed users were the most likely to report positive impacts, showing the highest proportions in eight out of the 13 categories.
- One exception is *education*, where unemployed users had a slightly higher proportion than students or employed users.
- Nearly identical proportions of employed and unemployed users reported positive impact on *access to employability resources* (76% and 75%).
- Overall, library users in Botswana reported higher levels of positive impact than those in Chile in all but two categories (*education* and *access to government information & services*).

## Between-venue analysis: Chile

### Age

- Library users across both age groups were more likely than cybercafé users to see positive impacts in most of the priority domain categories.

### Gender

- Both male and female library users were more likely to perceive positive impacts as compared to cybercafé users of the same gender, in some priority areas (particularly *income*, *health*, and *financial savings*).
- Female library users were more likely than female cybercafé users to report positive impacts on *income*, *education*, *health*, *access to government information & services*, *financial savings*, and *pursuing leisure activities*.
- Male library users were more likely than male cybercafé users to report positive impacts in all categories except *sending or receiving remittances* and *pursuing leisure activities*.

### Education

- Across all education levels, higher proportions of library users than cybercafé users reported positive impacts on *income*, *health*, *access to government information & services*, and *time* and *financial savings*.
- A higher proportion of high school/trade school cybercafé users reported positive impacts on *access to employability resources*, as compared to library users. Among users of other educational levels, however, library users were more likely to report positive impacts.

### Employment status

- Overall, employed library users were more likely than employed cybercafé users to report positive impacts.
- Among unemployed users, a higher percentage of library users reported positive impacts in the priority domain areas, while a higher percentage of cybercafé users reported positive impacts in the Communications & Leisure domain.
- In *education*, 92% of students reported positive impacts, in both cybercafés and libraries.

## GOAL ACHIEVEMENT AND IMPACT

### Between-country analysis: Botswana, Chile, Philippines

- For all domains, library users were generally able to meet their goals (ranging from 38% to 100% of those who had attempted a task).

- In Employment & Income, higher proportions of Chile library users said they achieved the final goal, compared to those in Botswana. For the other domains, all countries had similar levels of task completion.

#### Between-venue analysis: Chile

- In the Employment & Income domain, library users were slightly more likely to achieve an outcome than cybercafé users. However, 93% of cybercafé users who took a training course felt that the course had improved their work-related skills, compared to 85% of library users.
- In the Communications & Leisure, Culture & Language, Education, and Health domains, library users were more successful in some tasks and cybercafé users were more successful in others.

### COMMUNICATIONS & LEISURE

#### Between-country analysis: Botswana, Chile, Philippines

- 93% of library users in the Philippines and Chile who used public access for Communications & Leisure activities in the last 12 months claimed it had improved their skills.
- Among library users overall, participating in Communications & Leisure activities was associated with lower levels of perceived positive impacts in most of the other domains and categories. The exceptions were *education*, where 92% of Communications & Leisure users reported positive impacts (vs. 89% of other users) and *health* (45% vs. 40%).
- While websites were the most important resource for every task, a substantial number of respondents reported that email and social networking were of key importance in certain domains, especially for activities in Culture & Language (31%-39%), Education (10%-22%), and Employment & Income (15%-37%).

## Chapter 7: Benefits and Costs: How People Value Public Access in Libraries

This chapter presents survey data collected from library and cybercafé users in Chile and the Philippines, as well as additional survey data collected from library and cybercafé users in Chile only. The results show that both users and non-users of libraries placed a high value on public access in libraries.

#### Between-country and between-venue analysis: Chile, Philippines

- *Users*: Based on their annual costs to travel to a connected library, the minimum value that library users associated with libraries was \$43 in Chile and \$49 in the Philippines. In both countries, this was slightly higher than the cost of travel to cybercafés (\$33 in Chile and \$34 in the Philippines). This suggests that library users are willing to pay more to reach a connected library.
- *Non-users*: Non-users were also willing to pay for other people to have public access to ICTs. In Chile, which has an extensive network of connected libraries, non-users were willing to pay more to keep libraries open (\$14, vs. \$12 for cybercafés). In the Philippines, where cybercafés are more prevalent, non-users were willing to pay more for cybercafés (\$64, vs. \$51 for libraries).

#### Between-country and between-venue analysis: Chile

- In Chile, the public prefers libraries over cybercafés: both users and non-users were willing to pay an average of \$49 to keep libraries open, compared to just \$7 for cybercafés. People who reported using libraries valued them at \$53, while people who did not use libraries valued them at \$47. Similarly, cybercafé users valued cybercafés higher than non-users (\$8 vs. \$6).
- Among public access users in Chile, libraries were valued at a similar level by both exclusive users of libraries and exclusive users of cybercafés. For cybercafés, however, exclusive cybercafé users were willing to pay \$10 to keep cybercafés open, while exclusive users of other types of venues were willing to pay only \$5 to keep cybercafés open.
- Notably, while exclusive users of libraries were willing to pay \$50 to keep libraries open, the exclusive users of other types of venues were willing to pay *even more* (\$53) to keep libraries open. This suggests

that public access users who never use libraries still appreciate the value of libraries and are willing to pay to keep them going.

The full report, *Public libraries connecting people for development: Findings from the Global Impact Study*, can be found on the Technology & Social Change Group website at:  
<http://tascha.uw.edu/publications/public-libraries-connecting-people-for-development>.

**W**  
TECHNOLOGY &  
SOCIAL CHANGE GROUP

---

UNIVERSITY of WASHINGTON  
Information School

Technology & Social Change Group  
University of Washington Information School  
Box 354985  
Seattle, WA 98195

Telephone: +1.206.616.9101  
Email: [tascha@uw.edu](mailto:tascha@uw.edu)  
Web: [tascha.uw.edu](http://tascha.uw.edu)

Research conducted with the support of:



**IDRC | CRDI**

International Development Research Centre  
Centre de recherches pour le développement international

**Canada**

**BILL & MELINDA**  
GATES *foundation*