People share computers in cybercafés to learn from each other, not just to save money. Public access venues provide rich opportunities for personal interaction and collaboration. People can gain unique benefits from shared internet access in these contexts—public access is not merely a second-best alternative to using the internet at home or work. Public access practitioners can heighten learning and productivity among users by designing environments, technologies, and applications that foster collaboration.

Background

In low-income settings, business-operated cybercafés and other public access venues fill an important niche, one born of necessity. These are places people can go to connect to the internet when they are not able to connect at home or work. But in some contexts, people may prefer shared access rather than private, individualized connection because of the increased opportunities to collaborate and share knowledge.

This brief summarizes the report Understanding and Rethinking Shared Access: How People Collaborate and Share Knowledge and Technologies in Ghanaian Cybercafés by Michael L. Best, Sunil Garg, and Bence Kollanyi with Michelle Fellows. The report explores how people interact, share knowledge, and work together in two cybercafés in Accra, Ghana.

The study is one of seven in-depth inquiries of the Global Impact Study of Public Access to Information & Communication in Ghana.

Technologies. This study uncovers unique values of public access venues and makes recommendations for public access providers.

Research design

The study sought to identify:

• How do cybercafé internet users interact with one another and what types of collaborations occur—intentional, purposeful, accidental, fleeting?
• Why do people share computers and information at cybercafés? Is it in response to economic constraints, greater opportunities for collaboration and knowledge sharing, or something else?

Researchers addressed the above questions by:

• Surveying 150 cybercafé users about their computer use and the benefits or drawbacks of public access and sharing.
• Designing and deploying BusyBoard, an online content sharing system and display at one cybercafé.
• Developing and piloting a computer application to analyze video recordings of user behavior.

Findings

Collaboration and knowledge sharing in cybercafés is widespread and takes on many forms. Nearly half of survey respondents have shared a computer and collaborated with others at the cybercafé. Public access enables forms of sharing and collaboration among patrons that range from the most simplistic (such as asking a café employee a quick question), to the more formalized (such as meeting business partners and working together around a single computer), to the fleeting and voyeuristic (such as glancing at a stranger’s computer screen and noticing an interesting website).
The social dimension of cybercafés creates opportunities for collaboration. Ghanaian cybercafés are important social meeting places. The majority of survey respondents reported that they met with their friends, family members, or business associates while at the cafés. The physical setting and the social norms of the cafés let visitors interact with each other.

The main motivation behind sharing computers is not economic, and people share computers regardless of their demographic or economic position. Only 5% of respondents reported sharing in order to save money. It was also uncommon among cybercafé customers to share the cost of common computer use with others. Most of the people who share computers would continue to do so even if the price fell. The study also found that the main demographic variables, including wealth indicators and employment status, had little or no effect on sharing.

Users share computers because they want to learn from and teach each other. Nearly 75% of people who share a computer do so for educational reasons—to learn from each other (45%) or teach others (28%). Users also reported that sharing made their visits at the café more productive (58%), but not necessarily more fun (25%).

Open, interactive spaces may facilitate both formal and informal learning. More than one-third of respondents said they learned some critical element of computer use, such as email or internet browsing, by watching other people in cybercafés. This level of in-café learning was measurably higher at the rural cybercafé, which has more informal and interactive space, than at the urban cybercafé which has more shielded spaces.

Time, privacy, and design considerations can limit interest in public collaboration. Although computer sharing at cybercafés is popular, learning-oriented, and can be voyeuristic, the BusyBoard system and display did not directly facilitate collaboration or spur interpersonal interactions. Rather, as one participant noted, “people saw it as a broadcast system, a system for advertising—not for [interpersonal] communication.” Factors affecting usage included: limited time, discomfort with high visibility of BusyBoard content, preference for more intimate forms of sharing, privacy concerns, absence of content to hold users’ interest, and time lapse between posting content and when another user might be interested.

Recommendations
Create environments and applications that make it easier for users to interact with one another. The physical environment of and the technology available in the cybercafes studied was designed for single-users. Three-quarters of respondents were interested in enhancing cybercafes to support collaborative work. By designing workspace architectures and developing ICTs that promote person-to-person knowledge sharing, computer sharing, and group work, users gain opportunities to learn, be more productive, and form effective teams.

Consider users’ privacy concerns when designing the physical settings of the cafés, especially the arrangement of the computers. Despite the fairly high incidence of “voyeuristic or fleeting” learning, nearly all respondents felt privacy was an important issue in their use of cybercafes. Venues will need to find ways to balance the protection of users’ privacy while enabling casual, voyeuristic, and other types of informal learning.

Explore commercial opportunities. Users predominantly posted commercial advertising to BusyBoard. This shows that visitors saw the system as a useful way to advertise to the cybercafe’s clientele. Venues and technology designers can explore tapping into users’ commercial motivations to facilitate real-time interactive or collaborative behavior.

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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 cybercafes, the study investigates impact in a number of areas, including communication & leisure, culture & language, education, employment & income, governance, and health. The research was supported by Canada’s International Development Research Centre (IDRC) and the Bill & Melinda Gates Foundation. Learn more at http://tascha.uw.edu/projects/global-impact-study/

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. Learn more at tascha.uw.edu.

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