Overview

Moldova is the poorest country in Europe and is still struggling to break free of communist rule even though it gained independence from the former Soviet Union in 1991. Most of the resources for public libraries are concentrated in the capital of Chisinau, and other public access ICT venues are concentrated mostly in the capital and other urban areas. Finding adequate information to conduct this study was also challenging. The challenges ahead for improving public access to ICT are steep.

Findings

This study drew attention to the following list of issues and problems that characterize Moldova’s political, economic, and social position and affect the public’s access to information and ICTs:

- As Moldova established its independence and transitioned toward a market economy, the public library system suffered extensively from neglect, which produced a significant negative impact on public access to information.
- Because of the very limited local budgets and severe socioeconomic problems, especially in rural areas, public libraries have not received essential funding.
- The technologies, services, and information offered in Moldavian public libraries do not meet needs of the local population, especially in underserved communities.
- The library system in Moldova is unevenly developed, and the capital city, Chisinau, retains most of the available funding, technical equipment, and expertise.
- Public library development is notable only in those facilities that have benefited from projects, grants, and programs supported by international organizations and foundations, such as the Soros Foundation, USAID, and UNICEF. These few libraries contribute little to the total library system.
- With the meager economic recovery experienced in Moldova, the national government’s allocations for public libraries have increased slightly. Nonetheless, it is insufficient to support an adequate library system development.
- The non-governmental sectors are important providers of services designed to aid disadvantaged communities, and this especially noticeable in the way NGOs provide valuable services for local populations. The services include training in ICTs, and much of the effort focuses on gender equality, health, human rights,
ACE Scores

PUBLIC LIBRARIES

TELECENTERS

CYBERCAFES

Venue Distributions

<table>
<thead>
<tr>
<th>VENUES</th>
<th>ALL PUBLIC ACCESS</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS*</th>
<th>CYBERCAFES</th>
<th>OTHER VENUES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>number with ICT</td>
<td>5,650</td>
<td>10,017</td>
<td>5,489</td>
<td>3,720</td>
<td>1,391</td>
</tr>
<tr>
<td>% with ICT</td>
<td>ND</td>
<td>9,802</td>
<td>5,122</td>
<td>ND</td>
<td>349</td>
</tr>
<tr>
<td>% OF PUBLIC VENUES</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>POP. PER VENUE ('000)</td>
<td>1</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>with ICT ('000)</td>
<td>ND</td>
<td>15</td>
<td>6</td>
<td>ND</td>
<td>2,093</td>
</tr>
</tbody>
</table>

ND=No data

*See the last page for country-specific definitions of these venues. For this country, telecenters include NGO-operated centers, and other venues include telecommunication centers.

Data points are missing for some measures in some countries, which can result in oddities when comparing rows of data (for instance, the average number of venues with ICT appears high compared to the average number of venues). For a complete overview of comparative country data, please see the summary paper for this study.

User Profiles

<table>
<thead>
<tr>
<th>INCOME</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income</td>
<td>27%</td>
<td>28%</td>
<td>37%</td>
</tr>
<tr>
<td>Medium income</td>
<td>56%</td>
<td>54%</td>
<td>55%</td>
</tr>
<tr>
<td>High income</td>
<td>3%</td>
<td>7%</td>
<td>2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>16%</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>Only elementary</td>
<td>22%</td>
<td>16%</td>
<td>34%</td>
</tr>
<tr>
<td>Up to high school</td>
<td>34%</td>
<td>50%</td>
<td>33%</td>
</tr>
<tr>
<td>College or university</td>
<td>28%</td>
<td>28%</td>
<td>16%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 and under</td>
<td>7%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>15-35</td>
<td>59%</td>
<td>72%</td>
<td>46%</td>
</tr>
<tr>
<td>36-60</td>
<td>26%</td>
<td>12%</td>
<td>36%</td>
</tr>
<tr>
<td>61 and over</td>
<td>8%</td>
<td>2%</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GENDER</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td>% female</td>
<td>71%</td>
<td>53%</td>
<td>67%</td>
</tr>
</tbody>
</table>

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youth, volunteer services, agriculture, prevention of human trafficking, institutional developments, and social inclusion of impaired people. The most severe problem facing the NGOs is financial sustainability.

- Over the past decade before this study was conducted, one of the most dynamic and viable sectors of Moldova's economy was the telecommunications and information system. A modest amount of local e-content has been developed since the implementation of the National Strategy on Building an Information Society (“E-Moldova”). However, it is evident that Moldova still has a highly pronounced digital technology gap.
- Internet cafés and telecenters are concentrated in urban areas, especially in Chisinau, where the infrastructure affords easier connectivity and access to broadband connections.

Recommendations

Based on the information gathered during the course of this study, the researchers drew several conclusions. They determined that only very general information about the public access landscape in Moldova is available, and for example, there are no available data regarding the specific hardware and software installed in the urban and rural public venues that have ICT capabilities. Similarly, little specific parallel information was found regarding the equipment and services provided by the NGOs. The publicly available data that do exist are available only from studies conducted by a few different research centers.

The time during which the fieldwork was performed imposed limitations on the study. During the summer, the number of users who visit public libraries and NGO facilities each day is lower than at other times of the year and is due in part to the summer vacation period for the academic staff, students, and administrators. To gather and interview the necessary number of respondents within the pre-set timetable, the team increased the number of venues to be investigated.

The results of this study are relevant to Moldova by providing new empirical knowledge about (1) the key public access venues, their strengths, weaknesses, and the opportunities in these venues; and (2) the information needs of the population, with a particular focus on underserved communities. This is an important issue to study, as Moldova’s social and economic regeneration and the establishment of sustainable human development depends on the public access to ICTs, and their ability to adapt to the public’s needs.

The study results revealed the extensive discrepancies that exist between urban and rural areas regarding the access to public venues. The findings from the research can be valuable in enabling the nation’s government and other stakeholders to develop policies that will strengthen public access to ICTs, especially in underserved communities.

A subsequent representative national survey to provide greater qualitative and quantitative information to verify and validate the results of this study is highly recommended.
Geography & Economy

Moldova is a small, landlocked country in southeastern Europe and borders Ukraine to the north, east, and south. Romania lies to the west. The terrain primarily consists of hills and plains. Its main natural asset is fertile soil, which is the basis for the country’s productive agriculture system, but other than this and a few important mineral reserves, Moldova has few natural resources. The country relies heavily on imports, and virtually all of its energy resources are imported.

Moldova was established as an independent republic in 1991 following the collapse of the Soviet Union, and began transitioning toward a free market economy, but this transition has been marked by extensive political, social and economic turmoil which has driven the country into deepest and most prolonged economic recession experienced by any of the transitioning former Soviet states. Moldova is currently the poorest nation in Europe. The government has instituted a number of reforms to rectify its problems, but these have had only very limited success. In response to this decline, more than a third of Moldova’s population is estimated to be working in other countries as migrant laborers.

Moldova is a presidential parliamentary republic, and the president is elected by the parliament to a four-year term. The Communist Party of Moldova has ruled the country since 2001.

About this study

CIS’s Public Access Landscape Study examined how people around the world access and use information and computers in public settings such as libraries, telecenters, and cybercafés. Understanding public access is particularly important in developing countries where there is often limited private access to information and communication technologies (ICTs).

This study covered a carefully-selected sample of 25 developing countries containing over 250,000 public access settings. Local research teams surveyed over 25,000 people and conducted interviews and focus groups in order to develop a detailed picture of the public access ICT landscape in each country. CIS collected, interpreted, and analyzed these detailed county-level results, and also conducted cross-country comparative analyses to uncover common themes, challenges and opportunities.

The goal of this work is to help strengthen public access to information and ICTs around the world.

This project was conducted in two phases. During the first phase, country-based research teams prepared draft reports describing the information access landscape, presented a national assessment, and compiled a preliminary set of recommendations. In the second phase, teams identified the principal locations where people seek information: public libraries, cybercafés, telecenters, and other locations (such as private and religious libraries).

Local research teams used a combination of research methods to: (1) observe how people access information; (2) conduct surveys in information venues where they interviewed operators and users; and (3) perform secondary research and analysis of existing reports and documents using both local and international sources. Teams combined site visits and interviews to review the physical infrastructure and human resources of a variety of venues, and to determine the information content, service usage patterns, communication, and knowledge development. Additionally, teams examined the effects of environmental factors such as government policies, geography, and ethnic and linguistic differences.

Definitions

**ACE scoring framework**: Developed by CIS based on a modified bridges.org Real Access framework. The scale goes from zero to five, with 5 being the best possible score. ACE scores are calculated by evaluating dozens of variables having to do with ICT access, capacity and environment in public access ICT venues. “Access” includes variables such as accessibility, suitability, affordability, and the availability of technology; “capacity” includes training, relevant content and services, social appropriation, and collaboration capacity; and “environment” includes socio-cultural factors, popular support, political will, and a country’s legal and regulatory framework.

**Challenges ahead** (from table on front page): Estimates based on combinations of ACE scores indicating difficulty in improving country’s public access to ICT. From the fewest challenges to most, categories are: quick wins, steady gains, slow gains, and significant.

**CIS**: University of Washington Center for Information & Society (CIS)

**Cybercafés/Internet Cafés**: Not organized in any network, association or other collective body

**E-readiness**: The ability to use ICT for economic development, as determined by measures of connectivity and technology infrastructure, business environment, social and cultural environment, legal environment, government policy and vision, and consumer and business adoption. E-readiness is scored on a scale from 1 to 10. In 2008, the global e-readiness score was 6.4, with the highest levels in North America and the lowest in Africa and Asia.

**Gini coefficient**: Measures the inequality of income distribution. A low coefficient indicates more equal income distribution, while a high Gini coefficient indicates more unequal distribution. The global average is around 0.6; the US Gini is around 0.45.

**ICTs**: Information and communication technologies (especially computers and the Internet)

**Needs & Readiness indexes** (from table on front page): The needs index is comprised of three indicators: inequality, ICT usage and ICT cost. The readiness index is also comprised of three indicators: politics, skills and ICT infrastructure. Proxies are used for all indicators. See “Information Needs & Watering Holes” on the CIS Landscape Study website (www.cis.washington.edu/landscape) for a more detailed discussion of these indexes and proxies.

**NGO**: Non-governmental organization

**Non-urban**: Commonly labeled a rural area, but definitions of rural or periurban vary by country

**Public libraries**: Consist of country libraries, city libraries, and community (village) libraries

**Telecenters/Telecommunication Centers**: Organized in a National Network located in administrative centers; offer up-to-date services

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Front photo: Technology is playing an important role in facilitating protests around the world. In this case, Moldovans are using Twitter to organize protests against their government. This April 2009 photo was taken in front of the UN building in New York. Photo courtesy of Dan Patterson.