Malaysia

PUBLIC ACCESS LANDSCAPE STUDY SUMMARY

Overview

Malaysia holds the distinction of having the lowest public access ICT needs of any country in this study, and the highest readiness. Public access to ICTs via the country’s library system was among the best studied. The ICT infrastructure in urban areas is well-established, and ICT literacy and computer ownership are high except for in lower income groups. Mobile phone penetration is also very high. Improving access for underserved groups is still a challenge, but quick wins may be possible.

Findings

Malaysia’s government has initiated a well-supported policy to establish a technology-based society, and the effort actively promotes the development and implementation of information and communication technologies (ICTs). As a featured aspect of this initiative, the government has invested heavily in the infrastructure and venues to provide public access to information. ICTs are seen as a particularly vital contributor in achieving the national development goals, and Malaysia has been relatively successful in deploying and adopting ICT-based projects.

The ICT infrastructure in urban areas is well-established, and ICT literacy and computer ownership are high except for those in the lower income levels. Notably, the infrastructure and support services have lagged in the underserved and rural regions. However, there are policies and initiatives in place and several specific projects have been launched to bridge the digital gap between the urban and non-urban regions. These projects aim to improve accessibility to ICTs among underserved and rural communities and to deliver training, content building, and connectivity.

Much of the population has long had access to newspapers, television, and radio broadcasts, but mobile telephony penetration is now very high throughout Malaysia. Personal computer ownership is estimated to be as high as 88 percent in urban areas, but no more than 12 percent in the rural areas. In the urban areas, citizens can access information either at home, in the workplace, at the cybercafés, or in the many wireless hotspots that exist in public places such as shopping centers and cafes.

Libraries, cybercafés, and hot spots appear to be functioning reasonably well as information access venues. The libraries are being supported by new telecenters opened either in or near the libraries. There are currently 250 of such centers and more than 500 are planned. The telecenters have been quick to adapt the government and private sector investments in accessibility and the initiatives designed to create services that improve the general welfare of their respective communities.

With some exceptions, the activities at the telecenters seem to be useful in overcoming the information access...
**ACE Scores**

**Public Libraries**
- **Access**: 3.8
- **Capacity**: 3.1
- **Environment**: 3.2
- **Overall**: 3.3

**Telecenters**
- **Access**: 3.0
- **Capacity**: 2.7
- **Environment**: 2.5
- **Overall**: 2.8

**Cybercafes**
- **Access**: 2.9
- **Capacity**: 2.5
- **Environment**: 2.1
- **Overall**: 2.6

*Country score = 25-country average*

Shaded data points are outside standard deviation for 25-country set.
See the last page for country-specific definitions of these venues.
See the last page for a definition of the ACE scoring framework.

**Venue Distributions**

<table>
<thead>
<tr>
<th>ALL PUBLIC ACCESS</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS*</th>
<th>CYBERCAFES</th>
<th>OTHER VENUES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VENUES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total urban &amp; non-urban</td>
<td>1,368</td>
<td>1,326</td>
<td>42</td>
<td>ND</td>
</tr>
<tr>
<td>25-country average</td>
<td>10,017</td>
<td>11,11</td>
<td>1,273</td>
<td>6,893</td>
</tr>
<tr>
<td>25-country median</td>
<td>5,489</td>
<td>1,062</td>
<td>366</td>
<td>ND</td>
</tr>
<tr>
<td><strong>number with ICT</strong></td>
<td>ND</td>
<td>42</td>
<td>42</td>
<td>ND</td>
</tr>
<tr>
<td>% with ICT</td>
<td>ND</td>
<td>1,149</td>
<td>1,149</td>
<td>ND</td>
</tr>
<tr>
<td><strong>% OF PUBLIC VENUES</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>ND</td>
</tr>
<tr>
<td><strong>POP. PER VENUE ('000)</strong></td>
<td>19</td>
<td>20</td>
<td>622</td>
<td>ND</td>
</tr>
<tr>
<td>% with ICT</td>
<td>ND</td>
<td>622</td>
<td>622</td>
<td>ND</td>
</tr>
</tbody>
</table>

ND=No data
See the last page for country-specific definitions of these venues. For this country, telecenters include iCommunity 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>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCOME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low income</td>
<td>ND 28% ND 35%</td>
<td>ND 26% ND 24%</td>
</tr>
<tr>
<td>Medium income</td>
<td>ND 54% ND 46%</td>
<td>ND 56% ND 45%</td>
</tr>
<tr>
<td>High income</td>
<td>ND 7% ND 6%</td>
<td>ND 9% ND 4%</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>ND 3% ND 2%</td>
<td>ND 5% ND 6%</td>
</tr>
<tr>
<td>Only elementary</td>
<td>ND 16% ND 21%</td>
<td>ND 14% ND 13%</td>
</tr>
<tr>
<td>Up to high school</td>
<td>ND 50% ND 36%</td>
<td>ND 37% ND 32%</td>
</tr>
<tr>
<td>College or university</td>
<td>ND 28% ND 19%</td>
<td>ND 40% ND 28%</td>
</tr>
<tr>
<td><strong>AGE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 and under</td>
<td>ND 12% ND 15%</td>
<td>ND 9% ND 14%</td>
</tr>
<tr>
<td>15-35</td>
<td>ND 72% ND 51%</td>
<td>ND 74% ND 57%</td>
</tr>
<tr>
<td>36-60</td>
<td>ND 12% ND 23%</td>
<td>ND 12% ND 8%</td>
</tr>
<tr>
<td>61 and over</td>
<td>ND 2% ND 2%</td>
<td>ND 0% ND 1%</td>
</tr>
<tr>
<td><strong>GENDER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% female</td>
<td>ND 53% ND 49%</td>
<td>ND 39% ND 39%</td>
</tr>
</tbody>
</table>

ND=No data
Percentages may not add up to 100% in all cases
See the last page for country-specific definitions of these venues.
Data collected through interviews conducted by research teams. See country reports for details with regard to methodology, locations, timing, and data collection issues.
inequities among women, unemployed people, and owners of small and medium businesses. The real economic benefits have not been measured in any definitive manner.

There is little conclusive data to reveal the extent of the effort to build locally relevant content or to connect to other related content in the country although this has been claimed to be important.

**Recommendations**

In general, public access venues in Malaysia have been successful, and could be further enhanced by implementing the following:

- The venues need to offer greater assistance to underserved communities.
- The venues should encourage local participation and broaden the scope of their services.
- Provide far more locally relevant content both in Bahasa and English and address other ethnic groups and languages.

The access to information in urban areas is a reflection of private computer ownership and Internet access at home, the workplace, Internet cafes, a few libraries, and hot spots in public places. Only a few of these venues are available to the lower income strata.

There is a clear understanding in Malaysia that affordable access to ICTs remains beyond the reach of the underserved communities and groups and improved access for those people is an urgent need. Although much has been done to make the services of telecenters more accessible, there are still those who cannot afford even small fees.

As Malaysia moves toward an ICT-based society, the following ongoing digital initiatives within the public library network strive to build technological capacity in the population. Collectively, the following initiatives are expected to draw the attention of the public and motivate them by providing motivating types of information, as well as free venues in which the public can access information.

- **Yang di-Pertuan Agong**: This portal was established in 2004 to educate the public about the royal ruling system in Malaysia.
- **International Islamic Digital Library**: Developed in 2004, this portal contains digital content from books, manuscripts, magazine articles, conference papers, and Islamic artifacts.
- **E-Library User Education**: This educational portal was developed by the National Library and UNESCO to teach users about the benefits of the Internet through a self-taught course. Using interactive media in libraries across the country, the module uses a tutorial concept to educate users.
- **Local Digital Content**: A broad-based list of subjects has been provided to educate users about current events and important national historical information.
- **MyLib**: This is the pilot project for the larger National Digital Library Initiative launched in 2000. As part of the MSC initiative, it is intended to promote the economical and efficient delivery of information and knowledge to all levels of the Malaysian society as a step toward implementing a knowledge-based society. Most importantly, this portal aims to provide more local content on the Internet. MyLib is a part of the PERDANA system where it acts as a portal or medium to market the local content and database materials of all of Malaysia’s libraries via a website.
**Geography & Economy**

Malaysia announced its independence from Great Britain in 1957 and has grown to become a vibrant and modern nation in Southeast Asia. The country is composed of two regions — West and East Malaysia. The capital city of Kuala Lumpur is in the west central part of West Malaysia, which occupies the southern half of the Malay Peninsula and is bordered to the north by Thailand.

The population is estimated to be around 26 million, with most people of Malay, Chinese, and Indian origins. Malaysia's culture is diverse and while the majority of the population is Muslim, many are Buddhist and Hindu. Malay is the official language, but Mandarin and Tamil are widely spoken, and large numbers of the population speaks English as a second language. Overall, the literacy rate is high and education is compulsory.

The country's economy is strong, but has suffered from the global economic downturn of 2008. A significant percentage of the population is underserved and unemployed. Historically, Malaysia has been a significant source of agricultural products. Tourism, mining (tin), and fishing are also important to the economy. One of the most significant sources of revenue in recent years has been the burgeoning electronics manufacturing industry.

<table>
<thead>
<tr>
<th>COUNTRY PROFILE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population*</td>
<td>26.1</td>
</tr>
<tr>
<td>Urban population*</td>
<td>17.8</td>
</tr>
<tr>
<td>Literacy (%)</td>
<td>88.7</td>
</tr>
<tr>
<td>E-readiness</td>
<td>1.39</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>0.40</td>
</tr>
</tbody>
</table>

*World Bank 2006 data

**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 results, and also conducted cross-country comparative analyses to uncover common themes, challenges and opportunities.

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

**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.

**iCommunity Centers**: Developed under the ‘rural Internet project,’ a national IT policy created to bring ICT into rural areas: established in order to improve the level of ICT literacy and awareness among targeted rural and underserved communities, to compensate for traditionally low PC and Internet penetration, and to provide rural communities with the opportunity to use digital technologies to improve their quality of lives.

**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**: Most completed telecenters are built as part of the public libraries in the non-urban areas under the scope of Universal Service Provision (USP) project.

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**Front photo**: Internet café in Penang, Malaysia. Photo courtesy of Alex Pang.