Namibia

Overview

Namibia has high needs with regard to improving public access to ICT, and low readiness. However, steady gains are possible. Internet connectivity via landlines is low in both homes and public access venues, but cell phone coverage and use are high; focusing on this technology may be the most effective way of reaching underserved populations in areas with very low population densities. Improving literacy and clarifying government regulations might also help.

Findings

Overall, access to information and communication technologies is quite limited throughout Namibia. One recent survey indicates that the Internet in Namibia is accessed mainly at the workplace or in schools (out of 854 households, only 51 used the Internet, and of those, only 3.9 percent had an e-mail address). Internet access is not available to many because of the limited number of fixed landlines, the high cost of Internet access, the lack of electricity, and the lack of bandwidth.

However, mobile phone usage is high, and 65 percent of the country has coverage. That figure percentage jumps to 100 percent along Namibia’s arterial roads. Mobile telecommunication is thought to be the technology where the most significant advances in ICT access can be achieved. The publication of SMS messages in local newspapers, which are offered free, is an important means of disseminating information, as is radio, with over 94% of the population having access to this form of technology.

Given Namibia’s extremely low population density and the vast unpopulated landmass, segments of the population live in relative geographic isolation. Although there is a widespread need for access to ICTs, reliable electrical power sources beyond the more heavily populated communities are problematic. A few alternative energy sources, such as solar power and wind energy, are in use or are being investigated by MTC (the mobile operator) and SchoolNet Namibia. SchoolNet Namibia has been particularly successful in its primarily donor funded ICT support and training for schools in Namibia, which represents the largest number of ICT access points in the country.

Among the people who have even a limited access to the venues, there is a distinct difference between the usage patterns of those users under 25 years of age and older users. Most older users use the Internet for work and business communications. The Internet is seen as an information source and little time is spent using it as an entertainment medium.

Many users under 25 have access to ICTs for which they do not have to pay. They use mobile services to link with their social contacts through chats and text messaging. They use the Internet for e-mail, but most prefer social
ACE Scores

**PUBLIC LIBRARIES**  |  **TELECENTERS**  |  **CYBERCAFES**
---|---|---
Access | Capacity | Environment | Overall | Access | Capacity | Environment | Overall | Access | Capacity | Environment | Overall
2.9 | 3.0 | 3.7 | 3.4 | 3.3 | 3.4 | 3.1 | 3.1 | 3.4 | 3.2 | 3.1 | 3.2 | 3.0 | 3.3 | 3.1

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>VENUES</td>
<td>832</td>
<td>10,017</td>
<td>5,489</td>
<td>56</td>
</tr>
<tr>
<td>number with ICT</td>
<td>783</td>
<td>9,802</td>
<td>5,122</td>
<td>56</td>
</tr>
<tr>
<td>% with ICT</td>
<td>94%</td>
<td>98%</td>
<td>87%</td>
<td>100%</td>
</tr>
<tr>
<td>% OF PUBLIC VENUES</td>
<td>100%</td>
<td>100%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>POP. PER VENUE ('000)</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>37</td>
</tr>
<tr>
<td>with ICT ('000)</td>
<td>3</td>
<td>15</td>
<td>6</td>
<td>37</td>
</tr>
</tbody>
</table>

*See the last page for country-specific definitions of these venues. For this country, other venues refers to SchoolNet.

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 to be greater than 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>INCOME</td>
<td>Urban</td>
<td>25-country average</td>
</tr>
<tr>
<td>Low income</td>
<td>10%</td>
<td>28%</td>
</tr>
<tr>
<td>Medium income</td>
<td>80%</td>
<td>54%</td>
</tr>
<tr>
<td>High income</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>EDUCATION</td>
<td>Urban</td>
<td>25-country average</td>
</tr>
<tr>
<td>No formal education</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Only elementary</td>
<td>0%</td>
<td>16%</td>
</tr>
<tr>
<td>Up to high school</td>
<td>80%</td>
<td>50%</td>
</tr>
<tr>
<td>College or university</td>
<td>20%</td>
<td>28%</td>
</tr>
<tr>
<td>AGE</td>
<td>14 and under</td>
<td>11%</td>
</tr>
<tr>
<td>15-35</td>
<td>89%</td>
<td>72%</td>
</tr>
<tr>
<td>36-60</td>
<td>0%</td>
<td>12%</td>
</tr>
<tr>
<td>61 and over</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>GENDER</td>
<td>% female</td>
<td>28%</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.

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network sites. The Internet also is used to access music and films, mostly through pirated sources.
This study indicated that there are very few gender inequities among Namibia’s public access ICT venues.

**Recommendations**

A lack of certainty in the regulatory environment has limited the deployment more public access ICT solutions. There is also a need for service-neutral and technology-neutral licenses. The policy environment is in flux and the existing ICT policy is being updated. The telecommunications and regulatory environment is a monopoly held by two mobile operators, and they offer no provision for VOIP (Voice over internet Protocol) to the public.

There is also a need for better coordination among government agencies regarding ICT rollout to ensure the optimal use of the limited resources.

The government has mandated that all constituency offices are to be equipped with ICTs. The proposed Community Information Resource Centers will require shared use of the fiber-optic backbone already in these offices, as well as alternative power sources for those venues not on the power grid.

Other recommendations from this study include:

- Introduce more ICTs into libraries. This presents significant opportunities, but also significant challenges as only two public libraries in the country can currently connect to the Internet.
- An extensive ICT literacy campaign is required in the government as well the general population. ICT training should be used more prominently to train teachers, librarians, and civil servants.
- A situational analysis is needed to identify the existing community access points (clinics, libraries, schools, recreational centers, craft centers, etc.) and identify best practice.
- E-Government services need to be identified and implemented.
- More research is needed to assess the availability of content in local languages, the extent to which this is required, the likely levels of demand, and the types of content that could be developed for future use in libraries, schools, and youth development centers.
- With over 1 million mobile phone users in a population of 2 million people, there is great potential to reach the underserved through this form of technology.
Geography & Economy

Namibia straddles the Tropic of Capricorn on southwestern Africa’s Atlantic coastline. The former German colony, occupied by South Africa for most of the 20th century, emerged as an independent country in 1990. It has been governed by the Marxist South-West Africa People’s Organization (SWAPO) since then. The country functions under a representative democratic government with an elected parliament and national assembly.

Namibia is bordered to the north by Angola, the northeast by Zambia, the east by Botswana, the south by South Africa, and the west by the Atlantic Ocean. The country has a land area of 318,260 square miles and a population of just over 2 million, which gives it the second lowest population density in the world after Mongolia (although most of the population lives in urban areas due to the arid land). Eighty percent of the population is Christian. Seven percent of the people speak English, which is the official language, while 60 percent speak Afrikaans, and 32 percent speak German.

While Namibia has extensive agriculture, the country is best known as the world’s largest producer of diamonds, and the revenue from diamond mining drives the economy.

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: Include traditional cybercafé venues, as well as banks and post offices with Internet computers available to the public
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.

Educational institutions: Two main educational institutions looked at in Namibia: the Institute of Information Technology Windhoek, which provides IT training to students, generally from higher income backgrounds; and the Namibia Institute for Educational Development (NIED), which is an educational building complex for teachers, trainers, and curriculum developers.

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: Generally small, with only one room to accommodate ICTs, shelves, and a service counter
SchoolNet: The largest number of access points is currently set up through schools and the activities of SchoolNet Namibia. Most SchoolNet installations are situated inside the classrooms of existing schools with electricity and telephone access.

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Front photo: Cell phone tower (center) disguised as a tree.
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