



Kazakhstan

PUBLIC ACCESS LANDSCAPE STUDY SUMMARY



Overview

Kazakhstan faces many challenges as it attempts to improve its public access to ICT. The country has extremely low population density, and wide ethnic diversity. Venues have little relevant content, and the available information is difficult to access due to high fees, bureaucracy, travel distances, and other factors. Most importantly, there is little demand for the information. However, literacy is almost universal, economic growth has been strong, and the government and citizens appear to be ready and willing.

PUBLIC ACCESS LANDSCAPE	
Challenges ahead	Slow gains
Needs	Moderate
Needs (rank)	15/25
Readiness	High
Readiness (rank)	7/25

Findings

Kazakhstan's huge territory and low population density combined with its ethnically diverse population present a challenge to developmental and technological change. An over-dependence on extractive industries has worsened the situation.

At the same time, these factors present an opportunity to develop an information-based society using modern information and communication technologies that can bridge distances and differences in age, ethnicity, and language. The deployment of these technologies and the development of an information-based society present huge social, political, and cultural challenges.

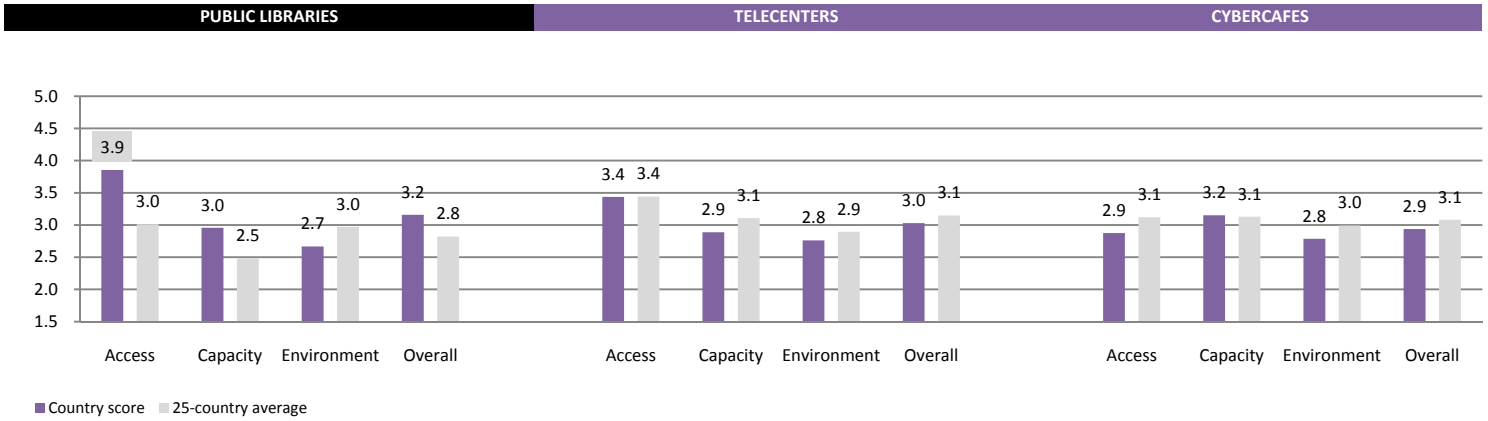
Rapid economic growth, high literacy levels, and new government programs are largely responsible for the increased computer and Internet penetration in Kazakhstan. Increased disposable income levels allow more and more people to own computers. Decreasing Internet tariffs and the increasing availability of broadband coverage in large cities allow for easier access to information.

Implementation of government awareness programs will provide access to key government services for all of the population, and especially to underserved and vulnerable groups.

Eight types of public access ICT venues were examined in this study:

- Public libraries are the most widespread and most common venue used to access information.
- Public Access Sites (PAS) are venues created as a part of the government Program on Reduction of Information Inequity. These venues include information kiosks, Internet access centers, and Internet access points at Kazakhtelecom (the national telecom operator) and Kazpost (the national postal service provider).
- Internet cafes are Internet access points that usually charge an access fee. Some are cafes with a few PCs offering Internet access, and other Internet cafes are part of computer gaming clubs.
- Wi-fi hotspots usually are free and hosted by cafés.

ACE Scores



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

	ALL PUBLIC ACCESS			PUBLIC LIBRARIES			TELECENTERS*			CYBERCAFES			OTHER VENUES*		
	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median
VENUES	5,222	10,017	5,489	3,272	1,111	1,062	1,200	1,273	366	650	8,693	3,225	100	398	46
number with ICT	5,122	9,802	5,122	3,272	349	96	1,200	1,149	257	650	8,507	3,251	ND	146	13
% with ICT	98%	98%	87%	100%	31%	20%	100%	90%	100%	100%	98%	100%	ND	37%	92%
% OF PUBLIC VENUES	100%	100%	100%	63%	11%	20%	23%	12%	11%	12%	73%	67%	2%	4%	1%
POP. PER VENUE ('000)	3	8	5	5	93	37	13	205	68	24	52	9	153	419	103
with ICT ('000)	3	15	6	5	2,093	208	13	242	119	24	62	10	ND	1,354	198

ND=No data

*See the last page for country-specific definitions of these venues. For this country, telecenters include PASs, and other venues include PICs, PSCs, and NGO resource centers. Country research team noted that the number of other venues was ">100."

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

		PUBLIC LIBRARIES				TELECENTERS				CYBERCAFES			
		Urban	25-country average	Non-urban	25-country average	Urban	25-country average	Non-urban	25-country average	Urban	25-country average	Non-urban	25-country average
INCOME	Low income	6%	28%	0%	35%	5%	26%	ND	24%	7%	26%	10%	6%
	Medium income	88%	54%	93%	46%	90%	56%	ND	45%	93%	56%	90%	88%
	High income	6%	7%	7%	6%	5%	9%	ND	4%	0%	9%	0%	6%
EDUCATION	No formal education	0%	3%	0%	2%	0%	5%	ND	6%	0%	5%	ND	0%
	Only elementary	0%	16%	0%	21%	0%	14%	ND	13%	5%	14%	ND	0%
	Up to high school	52%	50%	0%	36%	29%	37%	ND	32%	38%	37%	ND	52%
	College or university	48%	28%	100%	19%	71%	40%	ND	28%	57%	40%	ND	48%
AGE	14 and under	0%	12%	0%	15%	0%	9%	ND	14%	0%	9%	0%	0%
	15-35	100%	72%	73%	51%	100%	74%	ND	57%	94%	74%	91%	100%
	36-60	0%	12%	27%	23%	0%	12%	ND	8%	6%	12%	9%	0%
	61 and over	0%	2%	0%	2%	0%	0%	ND	1%	0%	0%	0%	0%
GENDER	% female	92%	53%	40%	49%	71%	39%	ND	39%	62%	39%	73%	92%

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.

- Population Service Centers (PSCs) are newly established government-funded sites that offer access to government services, government information, banking, and related subjects. The number is rapidly growing, and the range of information and services offered is rapidly expanding.
- Public Internet Centers (PICs) are Internet access centers hosted by NGOs and international organizations.
- NGO Resource Centers are part of a number of NGO development projects created as resource centers across the country. They provide limited access to ICTs and are open primarily to targeted groups. There are about 100 such centers, and all of them offer digital ICTs, but most are not open to the public on a walk-in basis.
- Educational Institutions are important access points, but most schools, colleges, and universities are inaccessible to the general public.

There is an urgent need to expand the quantity and improve the quality of publicly accessible information to serve the needs of the population, especially among underserved communities and groups. The venues that exist have little relevant content, and the available information is difficult for many users to access for a variety of reasons including high access fees, bureaucratic hindrances, travel distances, and other factors. Most importantly, there is little demand for the information. Consequently, capacity-building programs, ICT skill training, public awareness campaigns, local content development, and increased competition in the telecom sector are essential to developing an information-based society.

Inexpensive and broadly available ICTs would play an essential role in providing access to information, and this study demonstrates that services such as e-government, e-commerce, e-education, and e-libraries are very appealing in Kazakhstan.

Recommendations

- Public awareness programs, local content development, especially online, and capacity building projects are urgent needs.
- Many people are unaware of the services that libraries offer, and public libraries do not advertise. An awareness campaign would help to bring people to the libraries, and also would inform people about information kiosks at PSCs.
- A similar awareness campaign is needed for e-government because most citizens do not understand the specific benefits e-government can provide. Also, all government staff must fully understand what e-government is and what principles assure its success. These campaigns should be launched via modern marketing techniques.
- The e-government portal provides a few information services, but the content holds little relevance to most people. The range of interactive information services provided by e-government should be improved and should focus on those services in greatest demand.
- Disabled and marginalized groups require particular affirmative action, and little exists at the present to meet their needs. The government should identify these groups specifically and allocate resources to include these groups into the appropriate programs. The existing Program on Reduction of Information Inequity fails to identify such groups, and they need assistance to gain access to information, including government services. Government sponsored public access sites should include these groups when targeting populations and when advertising access.
- Many people are reluctant to search for information even when it is available because they are simply unaware that appropriate information exists and that it can benefit them directly. To be successful and meet the information needs of the population, it is necessary to show what information exists and how it can directly benefit individuals.

Geography & Economy

Kazakhstan is the ninth largest country in the world, but has a population of only 15 million. Roughly the size of Western Europe, the nation had been the second largest republic of the former Soviet Union until gaining independence in 1991. Since then, it has experienced enormous political, economic, and cultural changes. Kazakhstan's economy relies heavily on its extensive natural wealth in oil, gas and metal ores, including large deposits of uranium. The worldwide markets for these products produced nearly a 10 percent annual GDP growth in 2002 through 2006. However, the economy has been sharply affected by the recent worldwide financial crisis.

Kazakhstan shares borders with Russia, Uzbekistan, China, Kyrgyzstan, and Turkmenistan. The climate is continental, with warm summers and colder winters, and the precipitation varies between arid and semi-arid.

The country is governed by a bicameral parliament, and as Kazakhstan's head of government, a prime minister chairs the Cabinet of Ministers.

Ethnically and culturally, Kazakhstan is widely diverse. Kazakhs are the largest ethnic group, followed by Russians and more than 100 lesser ethnic minorities. Islam is the primary religion, followed by Orthodox Christianity. Although the official language is Kazakh, Russian is used predominantly in business and casual communications.

COUNTRY PROFILE	
Total population* (millions)	15.3
Urban population* (millions)	8.8
Literacy (%)	99.5
E-readiness	3.8
Gini coefficient	0.34

*World Bank 2006 data

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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 cybercafes. 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)

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: Schools, colleges, and universities that usually limit access only to students

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)

Internet cafés: Access centers that usually charge a fee, sometimes cafés with PCs offering Internet access, other times part of a computer gaming club

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

Population Service Centers (PSC): Newly established government-funded points of access to government services, government information, banking, and other services

Public Access Sites (PAS): Created as a part of the framework for the State Program on Reduction of Information Inequity, which includes information kiosks, Internet access centers, and Internet access points at Kazakhtelecom (national telecom operator) and Kazpost (national postal service provider)

Public Internet Centers (PIC): Internet access centers hosted by NGOs and international organizations

Public libraries: The most widespread and most common venue for access to information; ICTs free of charge to members; no programs to reach underserved populations

WiFi hotspots: Numerous locations that are usually free and hosted by restaurants and cafés

Front photo: Sign for Internet café in Kazakhstan. Photo courtesy of Beth Kolko.