

## Chapter 25

# Public Access ICT in Kyrgyzstan

**Tracey Naughton**

*Socio-Economic Consultant, Mongolia*

**Lkhagvasuren Ariunaa**

*Intec Company, Mongolia*

### EXECUTIVE SUMMARY

The Kyrgyz Republic is a landlocked country in central Asia and borders Kazakhstan, Uzbekistan, Tajikistan, and China. The country has a land area of 196,500 sq km but has only five million people. Kyrgyzstan declared its independence in 1991 after having been a republic in the former Soviet Union. The population is heavily concentrated in just a few scattered localities, and one third of those people live in urban communities. More than 64% of the total population and more than 50% of the rural population live in deep poverty. Nevertheless, the population in general is educated and literate, and the existing social capital is relatively high. The people with the higher literacy rates tend to be those who speak the Kyrgyz and Russian languages, and this segment of the population displays a strong interest in information and communication technologies (ICTs).

Given the extreme depth of poverty nationwide, the socio-economic classes can be delineated to some degree by their regional location. People

in the northern reaches are relatively wealthier, and that area is home to the Russian minority. The southern regions are less well developed economically and are home to a number of ethnic minorities, including Uzbeks, Tadjiks, and refugees from neighboring countries. The south is also troubled by ongoing border disputes, many of which are sparked by conflicts associated with the vigorous smuggling trade.

Only 30% of the entire country is suitable for habitation, with rugged mountains surrounding a few broad, grassy highland valleys and covering three fourths of the nation. The topography of this mountainous country makes it difficult to establish hardwire networks as it blocks line-of-sight transmissions. Landline networks beyond the more populous communities are quite limited.

Rural residents often live in remote villages that are difficult to reach because of the mountainous terrain, and many settlements are isolated in the winter by deep snow and treacherous roads. Largely because of the lack of reliable and stable electric power, rural areas rarely have the technology or infrastructure for digital access to information.

DOI: 10.4018/978-1-60960-771-5.ch025

Residents of the rural areas often migrate to seek work in the larger cities, or travel abroad to other countries, such as Russia and Kazakhstan. This economically driven migration is a drain on the able-bodied, predominantly younger, potential work force, and on a generation more aware of digital services and technologies.

Given the numbers of rural residents who move to cities and abroad, there is an increasing demand for affordable and reliable digital communication. Yet, half of the rural population lives in poverty that impacts their ability to access information, especially when fees and charges are levied, as is often the case with commercial Internet centers.

The severity of the social, political, and economic conditions in Kyrgyzstan led it to be selected to participate in this international investigative study. The study was designed to assess the ability of the public to access information and communication venues, and also to review the role of ICTs across the overall economic, political, and regulatory framework in Kyrgyzstan. The researchers assessed how the venues function, how they serve user needs, how they meet operational constraints, and how they realize successes.

The researchers focused on the environment of public information access venues to determine their strengths, weaknesses, opportunities, and the specific information offered. The researchers interviewed policy and decision makers, government representatives, and NGO and other private-sector representatives concerning ICT development in Kyrgyzstan. They examined the physical infrastructure, human capital of public access venues, information content, service usage patterns, communication and knowledge production, as well as environmental factors, such as governmental policies, geography, ethnicity, and linguistics. During the fieldwork, they reviewed applicable publications and interviewed stakeholders, operators, and users from the four selected public access venues: public libraries, e-centers, Internet clubs, and information and resource centers. The research was conducted during a school and university

summer holiday, and therefore, the researchers were unable to complete as many interviews as they had planned.

A number of initiatives by government, private sector, and international organizations support the establishment and operation of public access venues. In particular, the private sector has provided resources to establish and operate Internet clubs. International and donor organizations provide support for public access venues in rural areas and target underserved communities. The staff working on the projects regularly provide support, professional experience, and necessary knowledge. With the cooperation of the stakeholders, government, NGOs, private sector, and international and donor organizations in implementing the ICT projects, several projects were successfully established and managed.

The opportunities to invest in the technological development of Kyrgyzstan are strongest with regard to building capacity in the IT sector, infrastructure, the capacities of the staff and users, and to support development of locally relevant content. In addition, much is needed and remains to be done to improve the overall policy and the regulatory environment.

Investment considerations should not be based on the number of users served, but rather on the number of people who can benefit from ICTs. The potential benefits should include employment on-site and off-site, and access to educational information online.

## **COUNTRY OVERVIEW**

### **Introduction**

The Kyrgyz Republic is a landlocked, rugged, and mountainous country in central Asia that borders with Kazakhstan, Uzbekistan, Tajikistan, and China. The country has a land area of 196,500 sq km, but has only five million people. The mountains surround a few broad grassy highland valleys and

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/public-access-ict-kyrgyzstan/55847](http://www.igi-global.com/chapter/public-access-ict-kyrgyzstan/55847)

## Related Content

---

**The Influence of Knowledge Management Process Supported With Organizational Strategies on Organizational Performance via Organizational Innovation and Technology: The Case of Istanbul Stock Market**

Yakup Akgül and Mustafa Zihni Tunca (2019). *Human Performance Technology: Concepts, Methodologies, Tools, and Applications* (pp. 1508-1548).

[www.irma-international.org/chapter/the-influence-of-knowledge-management-process-supported-with-organizational-strategies-on-organizational-performance-via-organizational-innovation-and-technology/226630](http://www.irma-international.org/chapter/the-influence-of-knowledge-management-process-supported-with-organizational-strategies-on-organizational-performance-via-organizational-innovation-and-technology/226630)

**Is Information Ethics Culture-Relative?**

Philip Brey (2009). *Human Computer Interaction: Concepts, Methodologies, Tools, and Applications* (pp. 154-167).

[www.irma-international.org/chapter/information-ethics-culture-relative/22246](http://www.irma-international.org/chapter/information-ethics-culture-relative/22246)

**The Use of Systems Thinking, Systems Practice, to Elicit the Effectiveness of Cancer Support Services in the Southwest of England**

Gary Evans, Layne Hamerston, Lynn Marie Cherrett and Debbie J. Sadd (2018). *International Journal of Systems and Society* (pp. 13-29).

[www.irma-international.org/article/the-use-of-systems-thinking-systems-practice-to-elicit-the-effectiveness-of-cancer-support-services-in-the-southwest-of-england/223921](http://www.irma-international.org/article/the-use-of-systems-thinking-systems-practice-to-elicit-the-effectiveness-of-cancer-support-services-in-the-southwest-of-england/223921)

**Technological Revolution, Transhumanism, and Social Deliberation: Enhancement or Welfare?**

Ana Cuevas-Badallo and Daniel Labrador-Montero (2019). *Handbook of Research on Industrial Advancement in Scientific Knowledge* (pp. 57-73).

[www.irma-international.org/chapter/technological-revolution-transhumanism-and-social-deliberation/220149](http://www.irma-international.org/chapter/technological-revolution-transhumanism-and-social-deliberation/220149)

**The Role of the Organizational Structure in the IT Appropriation: Explorative Case Studies into the Interaction between IT and Workforce Management**

Ewan Oiry, Roxana Ologeanu-Taddeï and Tanya Bondarouk (2010). *International Journal of Technology and Human Interaction* (pp. 34-48).

[www.irma-international.org/article/role-organizational-structure-appropriation/46974](http://www.irma-international.org/article/role-organizational-structure-appropriation/46974)