

The following piece includes commentary from two CAMCA Network members – [Mariam Lashkhi](#), Deputy Chairperson of Georgia’s Innovation and Technology Agency and Associate Professor at Business Technology University, and [Talant Sultanov](#), Co-Founder of the Internet Society-Kyrgyz Chapter. Ms. Lashkhi and Mr. Sultanov provide their insights on digital transformation in the CAMCA region, beginning with Ms. Lashkhi’s view from the Caucasus and concluding with Mr. Sultanov’s perspective on Central Asia. [Learn more about the members of the CAMCA Network.](#)

Digital Transformation in the CAMCA Region



“The Black Swan of 2020 – COVID-19” has reshaped the globe and accelerated the process of digitalization. It has also transformed the globe’s startup regime - in all 195 countries, startups are in search of a surviving business model. The ones with agile and rapid approaches are advancing. Today tech corporations are considered as the “developed countries,” who have been very vocal about the amount of digital transformation they have provided to their customers and countries.

Digital transformation does not have geographical preferences. Uneven digital access hinders economic and social resilience in a pandemic outbreak. Therefore, agile intraregional policy responses addressing digital transformation and bridging the digital divide are crucial.

The South Caucasus region, earlier positioned as a “green-zone”, saw the region’s first cases of Covid-19 in late February. Swift containment measures and limited intraregional mobility have helped limit the spread of the virus. The immediate impact of the crisis on the region has been primarily economic thus far.

The economic impact on the region has been further exacerbated by the fall in oil prices, which directly hits Azerbaijan, but also affects some of the other EaP countries through the impact on trade and remittances, particularly Armenia and Georgia.¹

A necessary pre-condition to being able to respond to the pandemic in an effective and more efficient way, the South Caucasus countries had fortunately implemented significant reforms in recent years supporting digital economic development. The pandemic has accelerated the policy implementation process and has shown additional digital needs and benefits of this process to broader society.

Intensive support is being imposed in the medium to long-term to help SMEs recover quickly from the crisis by supporting the digitalization of SMEs and providing more flexible regulation and expedited access to finance. In addition, international organizations, including the European Union, are helping the region respond to the crisis. The EU reallocated €140 millions of funds to support the immediate responses. This process has generated business for professionals in the digitalization field and has brought new entrepreneurs into the market.

¹ OECD Policy Responses to COVID-19, COVID-19 crisis response in Eastern Partner Countries (May, 2020)

Azerbaijan:

Azerbaijan has introduced a broad economic support program encompassing ten support packages amounting to 2.5 billion AZN (USD 1.5 billion or 3% of GDP). The first package targets the four sectors of the economy that are expected to be hit the hardest (including tourism), with the government planning to cover employee salaries in part or in full. The second support package is to assist microbusinesses, with the amount of assistance equivalent to their tax payments.

To tackle digital challenges, the Government of Azerbaijan within and beyond the National Strategy of Information Society Development has implemented various awareness-raising activities for the MSMEs, including the Small and Medium Business Development Agency's efforts to hold online workshops for entrepreneurs facing economic hardship and to provide information regarding the available support measures.

ASAN, the state agency, held a Global Web Forum with the participation of high-level government and non-government officials from more than 20 countries to discuss the instruments and tools that countries can learn and share in order to respond to the global challenges. Innovation and digital transformation were also discussed.

Armenia:

Together with social and economic stimulus measures, Armenia has prioritized the integration of ICT in response to the global pandemic.

Armenia marked a sharp increase in its use of e-governance tools during the COVID-19 pandemic. Since 2016, the EU has committed over €20 million to support public administration and finance management reforms in Armenia. As a result, over 10 e-governance platforms have been launched, including the electronic document management system 'Mulberry', the electronic system of the State Register for Legal Entities, a unified website for draft legal acts, an electronic notary system and the Ministry of Justice hotline service (e.g. over 5,000 applications were sent in March 2020 via the one-window system).

The government also initiated the SME support program to withstand the challenges of the COVID-19 pandemic. It includes a series of free online training seminars on business development through digitalization, including e-commerce and sales. The program targets SMEs that want to increase their sales and expand their reach using the latest technology and innovative approaches.

Georgia:

According to the assessment of international partners, Georgia has distinctively overcome the challenges facing the education system during the pandemic. The International Organization for Economic Co-operation and Development has named the Covid-19 Challenge in Education as one of the best examples of distance education in Georgia. The United Nations Children's Fund also praised Georgia's measures taken in the field of education.

The strong strategy, reform and the immediate response to the challenge are a base of this success. The government established a high-level crisis management working group in January, ensuring effective implementation of reforms and responsiveness to the pandemic challenge. In response to the challenge, new digitalization and innovative solution grants have been launched. Through the Coronathon, new MedTech, IOT and GovTech solutions have been introduced to the industries fighting against the pandemic.

Together with the EU's extensive support, the World Bank pledged \$80 million to support Georgia's response on broader development needs, including digital connectivity and infrastructure.



As the Internet passes its 50th anniversary since the first electronic message was transmitted from UCLA to Stanford in October 1969, it reaches another major milestone – half of the world’s population is now online. Connecting the remaining half (those not online) is a much more difficult task, as this represents the people that have lower incomes and/or people that live in remote and hard to reach areas.

In the broader Central Asia region (including Afghanistan and Mongolia), just two out of seven republics are above the global average in terms of individuals using the Internet – Kazakhstan and Uzbekistan. The majority of the countries are well below the average. The situation regarding access to fixed broadband subscription is very low across all the countries in the region.

Percentage of Individuals using the Internet (ITU)		Fixed-broadband subscriptions (ITU)	
Afghanistan	13.5% (2017)	Afghanistan	0.04% (2018)
Kazakhstan	78.9% (2018)	Kazakhstan	13.4% (2018)
Kyrgyzstan	38% (2017)	Kyrgyzstan	5.64% (2018)
Mongolia	47.2% (2018)	Mongolia	9.66% (2018)
Tajikistan	22% (2017)	Tajikistan	0.07% (2017)
Turkmenistan	21.3% (2017)	Turkmenistan	0.09% (2017)
Uzbekistan	55.2% (2018)	Uzbekistan	12.7% (2018)

Providing access to Internet, and especially to broadband connectivity, is particularly difficult for landlocked-countries as they are far from the major fiber-optic lines that lay under the sea. For Central Asia, it is even more challenging – especially for the mountainous republics such as Afghanistan, Kyrgyzstan and Tajikistan, for the double-landlocked Uzbekistan and for the country with only two neighbors: Mongolia.

Access to the Internet in the 21st century is developing the same level of importance that access to electricity had in the 20th century. Broadband connectivity constraints adversely affect the cost, quality and speed of the Internet in the Central Asian countries, especially in rural areas, which in turn limits Central Asian countries’ ability to foster the uptake of digital technologies by government, business and society and to ultimately achieve faster progress in digital transformation. The potential social and economic impact that comes from better connectivity can be significant. As studies by the World Bank demonstrate, a 10% increase in broadband penetration leads to at least a 1% increase of GDP and a 1% increase in Internet penetration correlates with a 4.3% growth in total exports.

Recognizing the possibilities of the Internet for economic, social and cultural development, the countries of Central Asia have launched strategic digitalization programs and set ambitious goals for connecting the unconnected, for providing digital services and for improving skills. Initiatives to upgrade broadband connectivity are also underway in the countries of Central Asia.

For instance, the World Bank, which I joined a few months ago, is helping the Central Asian countries in these important efforts. The Bank shares its knowledge, provides grants and loans, helps attract investments and build partnerships. As part of the regionwide Digital Central Asia-South Asia program (Digital CASA), the World Bank is already providing financial support to digital development projects in Kyrgyzstan and in Afghanistan, while Digital CASA projects for Tajikistan and Uzbekistan are in the preparation process.

These projects share a set of common objectives:

1. To bring broadband internet connectivity to all communities by crowding-in private sector investment.
2. To build infrastructure for data management and storage and to develop digital services and smart solutions.
3. To develop digital skills among the population and to promote innovation and entrepreneurship as well as to build an enabling legal and regulatory environment.

Furthermore, the Bank's work includes two cross-cutting issues:

4. Open and big data
5. Digital resilience and cybersecurity (with the support of the Korea-WB Trust Fund)

In addition to the top-down government and major donor-led activities, equally important are grass-roots bottom-up initiatives to connect the unconnected, effectively turning the "last-mile" into the "first-mile" connectivity.

The Internet Society-Kyrgyz Chapter (www.isoc.kg) pioneered some of these initiatives in the region. It was founded by several Kyrgyz CAMCA Network members five years ago. Since then, the organization has implemented several projects on increasing connectivity, lowering prices and improving digital skills, including the following:

1. The case of 17-year old Ibragim in the remote village of Suusamyр is especially compelling. We taught him how to connect homes to the Internet. He has since become the Go-To Expert in Kyrgyzstan (www.currenttime.tv/a/29652289.html). (Pictured below)
2. Another project is the [itimBox](http://www.isoc.kg/itimbox/) project (Internet-in-a-Box)², where we bring educational content like Khan Academy videos and Wikipedia in Kyrgyz to schools and libraries in rural areas without access to the Internet (<https://youtu.be/K37i39r1ezE>). (Pictured below)
3. Lastly, we have implemented a regional project building the Fergana Valley Internet Exchange Point ([IXP](http://www.isoc.kg/ferghana-ixp/))³. The Fergana Valley, one of the most densely populated areas in the world, is also one of the least connected. The IXP would help lower prices for Internet connectivity, while improving speed and quality for people in Kyrgyzstan, Tajikistan and Uzbekistan.

These projects were implemented with the help of many partners such as the Internet Society (ISOC), UNICEF, the U.S. Embassy, EU Commission and many others. With the support of the Association for Progressive Communications ([APC](http://www.apc.org/))⁴, we shared our experience across the globe. All these projects are replicable in other countries and we look forward to cooperating with digital activists across the CAMCA region.

² <https://isoc.kg/itimbox/>

³ <https://www.internetsociety.org/blog/2018/03/ferghana-valley-ixp-reducing-digital-gap-central-asia/>

⁴ <https://www.apc.org/en/project/connecting-unconnected-supporting-community-networks-and-other-community-based-connectivity>

Photo: 17 year-old Ibragim is the go-to person in the remote mountainous village of Suusamyр in Kyrgyzstan. He connects village homes to the fiber optic internet. This village is probably one of the most remotely located away from the sea, and one of the highest in the world. It sits in a valley at 2,500 meters above sea level surrounded by mountains 4,000 to 5,000 meters high. For half a year, Suusamyр is covered by snow with temperatures reaching -50 centigrade. When the heavy snow falls, it breaks the fiber-optic lines that pass along the electric poles. Ibragim uses his ingenuity to fix the broken lines with locally available materials. For instance, he protects the restored internet cables by using plastic bottles. You can see many plastic bottles around the village hanging among the power lines. An eager, local elder waits for the internet to work again, as his grandchildren have started to visit him again from the city now that he has internet.



Photo: Internet Society activist Zhazgul delivers IlimBox to rural schools in Kyrgyzstan. Digital library IlimBox is for rural and remote schools and libraries that have no online access. This Internet-in-a-Box give rural kids access to digital educational content such as Wikipedia, Khan Academy and E-books in local languages.