Enabling E-resilience for All & Digital Platform in Central Asia

Arman Abdrassilov, Kazakhstan
Who am I?

Arman Abdrassilov

- AP-IS Bureau Member & Alternative Vice-Chair of the Working Group on Connectivity for All;

- TSARKA GROUP: Co-founder & GR Director of the of the largest cybersecurity company in Central Asia (HQ – Kazakhstan, Estonia, Poland, USA);

- SecDev Foundation: Senior Adviser (Canada);

- Ministry of Defense: Cybersecurity Adviser (Kazakhstan);

- National Holding Zerde: Ex-Chairman of the Board (Kazakhstan)
Two centers of gravity already exist

Leader Russia
EAEU

Leader China
One belt - one way

Leader EU – CA - China
Central Asia as a single Platform
Non-zero sum games

Games in which the gain of one player does not necessarily mean the loss of another, when all participants in the game can win at the same time, are called non-zero-sum games. Almost any economic activity is an example of a non-zero-sum game.

John Nash, Nobel laureate
New History of Central Asia

- GDP growth potential x2 by 2030
- Rapid adoption of digital and mobile technologies creating opportunities for the leap: Central Asia is the world leader in mobile money
- Young, fast-growing urbanizing population with large unmet needs
- Reducing the income gap to 2.6 times compared to developed countries
- Untapped wealth of resources and new innovations to unleash them
Why a single digital market is needed

Internet access level, 2020

54%*

GDP 2020
$290B*

WHO WILL BENEFIT FROM A SINGLE DIGITAL MARKET:

For People
Buying and selling goods and services from all countries of Central Asia
- Attracting investment from both Central Asian countries and external investors, contributing to faster growth and job creation
- Improving the quality of life of every citizen through technology

For Business
- Buying and selling on a $77M market
- Business begins to grow, innovate and compete on fair terms

For Government
- Platform development
- Exchange of methodology experience
- Scaling the best industry projects
- Common standards for legal acts, IoT technical standards, etc.

Potential market, million people*

Volume of the e-commerce market, mln. USD*

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume (mln. USD)</th>
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<tbody>
<tr>
<td>Kazakhstan</td>
<td>2143.4</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>643.9</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>162.8</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>54.7</td>
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* According to KPMG 2020.
### Challenges in unlocking this potential

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<tr>
<td>1</td>
<td>Various digital laws, regulations and policies</td>
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<td>2</td>
<td>Limited cross-country infrastructure and heavy dependence on infrastructure and products of external markets</td>
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<td>3</td>
<td>Digital markets are mostly national and do not benefit from the scale of the entire region</td>
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<td>4</td>
<td>Intermediate level of digital skills. According to the World Bank, Central Asian governments need to develop the digital ecosystem, as well as invest in the development of digital skills of the population</td>
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<td>5</td>
<td>Providing access to the Internet</td>
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Digital Central Asia as a platform will help unleash the potential through a single digital market

**Vision**
Transform Central Asia into a single digital market

**Mission**
Promote the “Digital Transformation of Central Asia” agenda based on an integrated multi-stakeholder approach
Key participants of the concept

Azerbaijan
Azerbaijan actively participates in the areas of the Digital Market Harmonization Initiative (DCR) and assumes the role of a coordinating country in the direction of the “Ecosystem of innovations and start-ups” and the subsection “Electronic customs”.

Kazakhstan
In Kazakhstan today, significant work is being done to develop innovation and build an innovation ecosystem, create a knowledge-intensive economy.

Kyrgyzstan
The issue of digitalization has been at a high level in Kyrgyzstan over the past few years. A number of important projects have been implemented in various industries - medicine, education, the transition to electronic document management.

Turkmenistan
The implementation of the Concept for the Development of the Digital Economy, launched in 2019 in the country, developed for the period up to 2025, is a roadmap for the technological transformation of all industries and their public administration, the formation of a knowledge economy based on a huge resource and production potential.

Uzbekistan
The Republic of Uzbekistan is implementing comprehensive measures for the active development of the digital economy, as well as the widespread introduction of modern ICT in all sectors of the economy, primarily in public administration and in the social sphere.

Tajikistan
There is significant interest and potential for a complete digital transformation of the Tajik economy, from new technology companies to e-government, cashless payments and smart city solutions.
How to create a single digital market in Central Asia?

**Connection**
Building a Sustainable Digital Infrastructure for Central Asia

**Implementation of innovations**
Promoting flexible policies and harmonization of regulations to attract investment in the digital landscape of Central Asia

**Transformation**
Leveraging Technology to Accelerate the Inclusive Adoption of Digital Public Goods and Services Across Central Asia
Level 1
Unification of legal acts - Digital Code

The Digital Code will rationalize the relevant legislation by combining a dozen and a half separate laws into one piece of legislation.

The code will also simplify the process and make the needs of digital transformation more clear.

As part of the development of a model Digital Code, it is planned to carry out the following types of work:

- Conducting an analytical study of the legislation of the countries of Central Asia in order to update, systematize the legislation regulating relations in the field of information and communication technologies (ICT), digitalization of public administration and sectors of the economy

- Development of a draft Model (standard) Digital Code for the countries of Central Asia
Level 2
Increase E-resilience of Central Asia

**Infrastructure development**
Infrastructure is the backbone and the most crucial resource for e-resilience. It is a baseline enabler of the society to utilize ICTs for resilience to external threats.

**Policy harmonization**
Policies influence e-resilience via building multi-stakeholder consensus on creating an enabling environment for ICT systems to be able withstand a blow and adapt to new conditions.

**New Systems and Apps**
New systems and apps act as a proxy for the capacity of a society to innovate and create new forms of preparedness and response in the face of a crisis.

**Regulation of Digital Data**
Digital data is the measure of the extent with which the society can utilize digital tools on a day-to-day basis, which today is indispensable for maintaining the normal way of life and avoiding economic downtime, while also providing valuable public response tools.

**Hazard & Exposure**
Hazard & Exposure is showing how much attention the society puts on disaster resilience in all of its forms, be it preparedness, response or recovery.
Indicators contributing to the pillar scores

**Infrastructure**
- Mobile cellular subscriptions per 100 inhabitants
- Percentage of Individuals using the Internet
- Fixed (wired) broadband subscriptions per 100 inhabitants
- Active mobile-broadband subscriptions per 100 inhabitants
- Mobile tariffs
- Handset prices
- Computer software spending
- Percentage of households with Internet access at home
- Percentage of Households with a computer
- 4G mobile network coverage
- Fixed-broadband subscriptions, >10 Mbit/s
- International Internet bandwidth per Internet user
- Internet access in schools

**Policies**
- Ease of doing business
- Legal framework’s adaptability to emerging technologies
- E-commerce legislation
- ICT Regulatory Environment
- Secure Internet servers
- Cybersecurity
- Regulatory quality
- Adult Literacy
- Mean year of schooling
- R&D expenditure
- Public trust in politicians
- Government Effectiveness
Indicators contributing to the pillar scores

**Hazard & Exposure**

*Risk Inform Index*

**New Systems and Apps**

- ICT PCT patent applications
- Firms with website
- R&D expenditure by businesses
- Government promotion of investment in emerging technologies
- Investment in emerging technologies
- Adoption of emerging technologies
- Use of a mobile phone or the internet to buy something online
- High-tech and medium-high-tech manufacturing
- High-tech exports
- Prevalence of gig economy
- Apps developed per person

**Digital Data**

- Online Service Index
- GitHub commits
- Wikipedia edits per million of population
- Availability of local online content
- Use of virtual social networks
- ICT skills
- Publication and use of open data
- Use of a mobile phone or the internet to access a financial institution account in the past year
- E-Participation
- Gender gap in Internet use
- Rural gap in use of digital payments
- Socioeconomic gap in use of digital payments
Level 3 Hyperautomation

- Analytics & Insights
- Intelligent Process Discovery
- Intelligent Document Processing
- Robotic Process Automation
Thank you for your attention!