Fifth North and Central Asia Multi-Stakeholder Forum on Implementation of the SDGs

Building Back Better from COVID-19 while Advancing the Full Implementation of the 2030 Agenda for Sustainable Development

Session 8: SDG17 Partnerships for the Goals

Context on the technology and innovation landscape in North and Central Asia

October 7, 2021
Impact of COVID-19 on digital transformation

✓ Consumer surveys show that digital adoption among consumers has increased at an accelerated pace, varying according to the severity of restrictions imposed in different locations.

Accelerating impact of COVID-19 on digital transformation

✓ Adoption of digital technologies among enterprises has accelerated by several years to improve online consumer and supply-chain interactions as well as internal operations.
Global technology overview

- Fixed broadband subscriptions: 15.2% (+5.7%)
- Mobile broadband subscriptions: 75% (+9.3%)
- Individuals using the Internet: 51.4% (+3.5%)
- Women and men using the Internet: 48.3% w/ 55.2% m
- Mobile network coverage: 96.7% (+0.2%)
- Urban household Internet access: 72%
- Rural household Internet access: 37%
- Household Internet access: 57.4% (+3.7%)
- Percentage of population within reach of a 3G signal: 93.1% (+1.9%)
- Percentage of population within reach of a 4G signal: 84.7% (+4%)
- Total international bandwidth: 717.9 tbit/s (+35.7%)
- International bandwidth per Internet user: 131.3 Kbit/s (+26.4%)

*2020 estimate
Global technology overview

Coverage and access

Coverage by mobile networks

- 2020*: 98.6%
- 3G: 88.7%
- 4G: 80.8%

* estimate

Internet access and use

<table>
<thead>
<tr>
<th>2017</th>
<th>2020*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet users (%)</td>
<td>66.1%</td>
</tr>
<tr>
<td>Mobile broadband access (for 100 people)</td>
<td>73</td>
</tr>
<tr>
<td>Fixed broadband access (for 100 people)</td>
<td>17.8</td>
</tr>
</tbody>
</table>
ICT-centric innovation performance overview

Key engine of growth indicators (adapted from ITU IDI, Global Innovation Index, Global Competitiveness Index, Global Entrepreneurship Index)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>75/176</td>
<td>69/132</td>
<td>69/141</td>
<td>82/137</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>65/176</td>
<td>80/132</td>
<td>58/141</td>
<td>56/137</td>
</tr>
<tr>
<td>Georgia</td>
<td>74/176</td>
<td>63/132</td>
<td>74/141</td>
<td>71/137</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>52/176</td>
<td>79/132</td>
<td>55/141</td>
<td>59/137</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>109/176</td>
<td>98/132</td>
<td>96/141</td>
<td>99/137</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>45/176</td>
<td>45/132</td>
<td>43/141</td>
<td>80/137</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>-</td>
<td>103/132</td>
<td>104/141</td>
<td>98/137</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>95/176</td>
<td>86/132</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## ICT-centric innovation performance overview

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>Upper-middle income</td>
<td></td>
<td></td>
<td></td>
<td>Above expectations for level of development</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Upper-middle income</td>
<td></td>
<td></td>
<td></td>
<td>In line with expectations for level of development</td>
</tr>
<tr>
<td>Georgia</td>
<td>Lower-middle income</td>
<td></td>
<td></td>
<td></td>
<td>Above expectations for level of development</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>Upper-middle income</td>
<td></td>
<td></td>
<td></td>
<td>Below expectations for level of development</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>Lower-middle income</td>
<td></td>
<td></td>
<td></td>
<td>In line with expectations for level of development</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Upper-middle income</td>
<td></td>
<td></td>
<td></td>
<td>Below expectations for level of development</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>Low income</td>
<td></td>
<td></td>
<td></td>
<td>In line with expectations for level of development</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
Engines of growth of innovation ICT-centric ecosystems

- High-growth technology companies
- Support ecosystem
  ✓ High-tech companies
  ✓ Original equipment manufacturers
  ✓ System integrators
  ✓ Firms in ICT sectors
  ✓ Business-to-business (B2B) technology platforms that support SMEs

- Research institutions
- Academia and public sector entities
  (national innovation agencies and public sector financial institutions)

- Entrepreneurs
- Entrepreneur’s support systems and support organizations
  (the formation through the “valley of death” and growth as SMEs)
To harness the benefits of the digital economy and society for their citizens and firms, policy makers and regulators need to take a comprehensive whole-of-the-government approach.
Key factors for digital transformation development

1. Vision and strategy
2. Infrastructure and programs
3. Talents and leaders
4. Capital and resources
5. Markets and interactions
6. Culture and communities
7. Regulation and policy
«Progress can only be made through a multistakeholder and partnership-based approach and that the direct leadership of governments, policy makers, and the regulator community is essential to achieve meaningful and universal connectivity».

ITU global initiative Partner2Connect

Connect2Recover
Thank you

Ms. Natalia Mochu
Regional Director
International Telecommunication Union

natalia.mochu@itu.int