The future of cooperation partnerships between developed and developing countries

Hadi Hedayati, PhD
Deputy Minister

Symposium on
“Strengthening the Capacities of Public Institutions & Developing Effective Partnerships to Realize the 2030 Agenda for Sustainable Development”
October 25th, 2018
Technology and us

Previous industrial revolutions liberated mankind from animal power

• Technology is reshaping the world
  – Artificial and Natural intelligence is merging

• Let us appreciate breakthroughs and scientific discovery
  – It will be impacting all disciplines, economies and industries
  – This will even be challenging ideas about what it means to be human
Ideas for life

• Countries connected by sea or land
  – Technology made all like a village
    • Look at Facebook
  – Still each country has its own currency
    • The blockchain technology maintains the Bitcoin transaction ledger
      – This is the biggest bank in the world
  – So, we should be connected to each other
Ideas for life

• 1 day a mobile phone will emit oxygen and not radiation, more changes in next 30 years
• Business operations will link with mathematical functions
• Artificial intelligence, 3D printing, efficient sustainable production and robotics will make, manage and mend products and services
• Korea developed a lot in ICT
• We need your support from hard-core Engineering point of view for 4IR, role of UN organization (UNPOG, UNDP, ...)

Current status

• Afghanistan will face these issues much slower
• But we developed a lot in last 15 years
• We link via best fiber optic service and wireless communication
• Silk road project connects (China, Kyrgyzstan, Tajikistan, Afghanistan) 4700 KM
• Digital CASA project is reshaping lives of our people
• Our talents are all set to meet global demands and expectations
• Regional connectivity (Turkmenistan, Uzbekistan, Tajikistan, Iran, Pakistan)
Current status
apart to regional connectivity
Current status apart to regional connectivity

- Security Entities
  - NDS, MoD, MoI
  - Presidential Palace

- Private Sector
  - Banks and other Private Agencies

- Other Gov. Entities
  - MoF, MoFA, MoHE, MoPH,
Current status

• 92% of country is covered by wireless telecommunication
• 76% of country is covered by fiber optics for 4G communication
• Planning to have a new satellite with 24 transponders
• 60%+ government employees are now computer literate
• Cost of internet average is lower than 12USD
• All set to become a regional IT hub by 2022
The ICT sector development

<table>
<thead>
<tr>
<th>Year</th>
<th>Infrastructure and Service</th>
<th>Private Investment</th>
<th>Government Revenue</th>
<th>Subscribers</th>
<th>Coverage</th>
<th>Jobs</th>
<th>Telephone Penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Very little infrastructure and almost no service</td>
<td>$3 Billion</td>
<td>$300 Million</td>
<td>25 Million</td>
<td>92%</td>
<td>180,000</td>
<td>90%</td>
</tr>
<tr>
<td>to date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The robotic girls team enabled to win the races.
Developed and Developing Countries

• In First World countries people already enjoyed
  – benefits of a connected world, as well as new products and services

• Need to adequately plan and regulate this new capability
  – to ensure there is appropriate global equitabilities.
  – social tensions due to the socioeconomic changes brought by the Fourth Industrial Revolution

• The job markets segregated into “low-skill / low-pay” and “high-skill / high-pay”
Challenges

- IT’s biggest future challenge is security,
- Can negatively impact connectivity of public networks,
- If not solved, government will stay aloof from citizens
- Distrust will grow, people cannot interact with government
- Artificial Intelligence cannot solve it, only skilled people can
Probable Solutions

• We must be proactive in shaping this technology and disruption.
  – requires global cooperation on how technology should reshape our global, economic, social, cultural and individual lives now on.
  – develop leaders with the skills to manage organizations through these dramatic shifts; or else we will be swept completely.
  – Our education and training system need to adapt to better prepare people for the flexibility and critical thinking skills they will need.
Result and conclusion

- Augmented Reality, IoT, Big data, Bio-printing, Quantum Computing, Genetic Engineering, Nanotechnology, Synthetic Biology calling us
- One day technology will vanish food shortages and other problems
- In future there will be vaccine for all cancers and much more
- Let me leave the rest to your imagination
let's be hope for the global partnership for sustainable development
Thanks for your kind attention!

Hadi Hedayati, PhD
Deputy Minister
HDHEDAYATI@GMAIL.COM