Consultation Workshop on
Prospects for Cambodia’s Economic Transformation: A Strategic Framework for Cambodia’s Digital Economy
Monday 4 November 2019
Fostering an inclusive digital transformation in Cambodia

Presentation at RCG-CDRI-ODI-DFAT workshop
Phnom Penh, 4th November 2019

Dr Dirk Willem te Velde (ODI)
Overview of presentation

1. Digital profile, policies and initiatives – whence?

2. Key areas in the Royal Government of Cambodia’s long-term framework for digital economy – whither?

3. Analysis of Cambodia’s digital transformation especially its inclusiveness

4. Five targeted policy areas for enhanced inclusiveness of Cambodia’s digital transformation
Cambodia’s digital profile:
Rapid increase of internet users especially amongst 15-24 age group

Figure 2: Individuals using the internet, Cambodia, Thailand and Vietnam, 2000–2016 (% of population)

Figure 3: Percentage of individuals using the internet, by age group and country

Source: WDI

Source: ITU (2018)
Cambodia’s digital profile: Progress in networked readiness but lagging behind other countries

Figure 4: Networked Readiness Index, 2008–2016

Source: WEF (2008–2016)
Cambodia’s digital related policy initiatives (since 1995)

- Includes a range of policies/strategies
  - Rectangular strategy
  - Industrial Development Strategy
  - Masterplan
  - E-commerce law 2019
  - Vision 2050
- And several digital initiatives
  - E-mail in early 90s
  - Wing 2009
  - 7 mn facebook users now
Cambodia’s long-term policy framework for the digital economy

• Digital infrastructure (soft and hard)

• Digital human resources including technical, cognitive and soft skills

• Business ecosystems

• E-government

• Digital trustworthiness
Inclusive digital transformation

- **AGRICULTURE:** A gradual start
- **MANUFACTURING:** Missed opportunity?
- **SERVICES:** Significant advances
- **E-GOVERNMENT:** Laggling behind?
AgTech is being introduced gradually

• Ag-platforms; data connected optimisation; blockchain; robotics, AI and automation

• E.g.: BlocRice and Oxfam (PPT); RIICE and AIFD; e-Agro suite and Intel Grameen Social Business; Intel Connected Logistics Platform; AI/ disease identification: Nuru

• Supports Cambodia’s transformation: Connect farmers to markets; improve information; reduce transaction costs; raise agriculture productivity.

• Would everyone gain? Entry costs, displacement?
Manufacturing: digitalisation not well advanced

- Operating costs of robots in developed countries down as labour costs in developing countries are up
- Case studies of garment firms in SSEZ and PP, wire-harnessing in PPSEZ, watches in SSEZ, confirm
  - few/no innovation, rising wages, subsidiaries of MNEs that automate / digitalise; cul-de-sac for Cambodian workforce?
- NEA: 35% garment firms (AV=46%) want to innovate
- WBES data confirm lack of web-use in KH

Fabric cutting machine

Inputs into analog watches

Table 3. Share of firms with own website: Cambodia in comparison (%)

<table>
<thead>
<tr>
<th>Country</th>
<th>Year of survey</th>
<th>All firms</th>
<th>Exporting firms</th>
<th>Firms with more than 10% foreign ownership</th>
<th>Manufacturing firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>2016</td>
<td>24.2</td>
<td>12.4</td>
<td>22.6</td>
<td>14.3</td>
</tr>
<tr>
<td>Myanmar</td>
<td>2016</td>
<td>13.2</td>
<td>22.5</td>
<td>29.7</td>
<td>17</td>
</tr>
<tr>
<td>Laos</td>
<td>2018</td>
<td>30.9</td>
<td>69.1</td>
<td>75.6</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>2016</td>
<td>45.5</td>
<td>88.1</td>
<td>90.5</td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td>2015</td>
<td>48.6</td>
<td>57.5</td>
<td>46.8</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>2015</td>
<td>20.5</td>
<td>54.4</td>
<td>74.7</td>
<td></td>
</tr>
</tbody>
</table>

Digitally enabled services: exciting / promising progress

<table>
<thead>
<tr>
<th>Type of services</th>
<th>Progress</th>
<th>Opportunities and challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport services:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PassApp, Grab, Wego or TADA</td>
<td>Many TukTuk drivers now use one or these platforms</td>
<td>Excludes less technologically advanced drivers, opportunities depend on ability to adapt</td>
</tr>
<tr>
<td>Financial services: Pi Pay</td>
<td>Significant coverage accounting for some $150 million, compared with Wing, which processed $2 billion</td>
<td>Targeted initially at urban consumers; how can the poorest also benefit?</td>
</tr>
<tr>
<td>Transport services:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BookMeBus</td>
<td>More efficient ticketing and greater occupancy</td>
<td>Dealing with those dependent on inefficient ticketing, control over receipts</td>
</tr>
<tr>
<td>Telecommunications sector</td>
<td>Competitive sector but dominated by major deals</td>
<td>Will this be rolled out to rural areas; who gains most from large telecomms deals??</td>
</tr>
<tr>
<td>Business services:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ink Animation</td>
<td>Initial progress with around 60 staff, exports of services to major companies</td>
<td>Can this sector reach scale in Cambodia? If so, how?</td>
</tr>
<tr>
<td>Business services:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MangoTango</td>
<td>Founded in 2014, providing offshored (exports of) services e.g. for Google</td>
<td>Much scope for digital labour</td>
</tr>
<tr>
<td>Government</td>
<td>Weak implementation of e-government initiatives</td>
<td>Opportunity for progress, but threat it is the weakest link</td>
</tr>
<tr>
<td></td>
<td>Significant telecommunications deals</td>
<td></td>
</tr>
</tbody>
</table>

Source: Interviews during 2019

→ Increased employment (digital labour)
→ Increased efficiency (with risks of displacement)
Table 5. E-Government Development Index rankings

<table>
<thead>
<tr>
<th>Country</th>
<th>EGDI score</th>
<th>2018</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>0.6543</td>
<td>73</td>
<td>64</td>
</tr>
<tr>
<td>Vietnam</td>
<td>0.5931</td>
<td>88</td>
<td>91</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0.3753</td>
<td>145</td>
<td>139</td>
</tr>
<tr>
<td>Myanmar</td>
<td>0.3328</td>
<td>157</td>
<td>144</td>
</tr>
<tr>
<td>Laos</td>
<td>0.3056</td>
<td>162</td>
<td>156</td>
</tr>
</tbody>
</table>

Source: United Nations E-Government Survey 2018
Five focal areas for an inclusive digital transformation

• Radically transforming innovation in the manufacturing sector
• Providing skills for the future
• Nurturing the digital start-up economy for an inclusive economy
• Protecting and enabling the most vulnerable groups to take part in the digital economy
• Promoting a public sector that leads by example.
Policy area 1: Transforming innovation in manufacturing

- Incentives to innovate
  - Ecosystem to attract and nurture digitally / technologically advanced investors
  - Skills Development Fund, targeted TVET places
  - Use DFI investment (eg IFC in VietNam)

+ Make it easier to operate (incl. through e-govt?)

- Digital SME clusters / zones around manufacturing
Policy area 2: Skills for the future

- Technical, cognitive, soft skills, e.g. lack of specific ICT skills, eg less than 30% of KH population can copy a file - 50% Indonesia; less than 3% can connect new devices; less than 1% can configure software; 0.4% of TVET students are in manufacturing.

- Lack of quality skills at schooling levels known, but new initiatives at post-secondary level are important too:
  1. Promote sector skills councils (SSCs), around auto-mechanics, construction, electric, manufacturing, and embrace a digital economy
  2. Promoting links between higher education institutes and the private sector, such as through placements in industry;
  3. Promote use of Skills Development Fund
1. Rapidly emerging, e.g., co-working spaces in urban areas, but do these lead to innovation also at the bottom-of-the-pyramid?

2. Promote eco-systems and foster collective actions around innovation for the poorest (e.g., impact prizes)
Policy area 4: Protecting the most vulnerable along digitalisation transformation

Table 9. Social protection measures required to complement digitalisation

<table>
<thead>
<tr>
<th></th>
<th>Digital literacy and pro-poor digital infrastructure</th>
<th>Support for affected groups</th>
<th>(Re)training and sector support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drivers or retailers not yet part of digital platforms</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Booking apps</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Blockchain in agriculture</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Garments and other manufacturing</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Source: Text.
Policy area 5: A public that leads by example

• E-government considered a challenge; needs further attention

• Can government leave no one behind in digital transformation?

• Regulating telecommunications sector needs further attention

• Examples of big changes, eg. Estonia? → (i) openness to change after independence, including through young leadership; (ii) privatisation and innovation; (iii) low costs of digitalisation; (iv) availability of ICT talent and closeness to digital leaders in Scandinavia; and (v) decentralisation and flexibility

• Needs institutional framework to oversee design and implementation of digital economy framework
Conclusions

1. Cambodia has advanced significantly along the digital transformation path; now is the right time to be consulting on a new long-term policy framework.

2. Many excellent ideas, analysis, actions already.

3. There should also be enhanced focus on the inclusiveness of DT, including the sector/distributional implications of digitalisation and supporting the poorest and most vulnerable.

4. We propose five policy areas for further discussions.