Beyond Unicorns

Harnessing Digital Technologies for Inclusion in Indonesia

Sailesh Tiwari

2021
What are the different ways people can benefit from the digital economy?
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Big strides in boosting connectivity...
Increase in Internet access among adults (15+)

**2011**

13%

**2019**

51%
But many yet to get on board

Proportion of individuals 15+ with access to the internet

Urban
National
Rural

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But many yet to get on board

↓ Proportion of individuals 15+ with access to the internet

Urban

National

Rural

↓ Proportion of adults with access to the internet, by island regions in 2011 and 2019

Java-Bali
Kalimantan
Sumatera
Sulawesi
Maluku
Nusa Tenggara
Papua

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But many yet to get on board.
Fixed broadband penetration lagging neighbors..

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Affordability a constraint for many

Reasons for not subscribing to fixed broadband, broken down by island regions

- **Papua**
- **Nusa Tenggara**
- **Maluku**
- **Sulawesi**
- **Kalimantan**
- **Java-Bali**
- **Sumatera**

Legend:
- Have mobile
- No Provider
- Expensive
- Low speed
- No Need
- Other

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Quality is another impediment to productive use of the internet.

<table>
<thead>
<tr>
<th>Mobile broadband throughput (Mbps)</th>
<th>Fixed broadband throughput (Mbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>54.37</td>
</tr>
<tr>
<td>Vietnam</td>
<td></td>
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<tr>
<td>Thailand</td>
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<td>Brunei</td>
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<td>Myanmar</td>
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<td>Lao PDR</td>
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<td>Malaysia</td>
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<tr>
<td>Cambodia</td>
<td></td>
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<tr>
<td>Philippines</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>14.05</td>
</tr>
</tbody>
</table>

| Singapore                        | 197.26                           |
| Thailand                          |                                 |
| Malaysia                          |                                 |
| Vietnam                           |                                 |
| Lao PDR                           |                                 |
| Philippines                       |                                 |
| Brunei                            |                                 |
| Cambodia                          |                                 |
| Indonesia                         | 20.03                            |
| Myanmar                           |                                 |

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Indonesia is the 5th most internet-engaged country in the world. Indonesians who are connected use the internet quite intensively.
Indonesians who are connected use the internet quite intensively.
E-commerce generating value for consumers

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Ride-hailing provides crucial connectivity services & a whole lot of other amenities.

One in four Indonesians and almost 2 in 5 urban dwellers reported using digital ride-hailing services.

21% of the urban population ordered food using the digital ride-hailing apps.
Newer opportunities for workers, but concentrated in certain sectors, geography and among certain types of workers.

33% of digital gig jobs were being performed by workers for whom this was their first ever job.

10 HRS a week of work on average more than every other type of worker in Indonesia.

6.2% more per hr in earnings for digital gig workers.
E-commerce too is generating opportunities, but several challenges constrain scaling of benefits.

- Cost of logistics
- Limited trust in digital payments/financial services
- Connectivity

10.4%

13.2 million out of 127 million employed workers were engaged in e-commerce.
Low overall adoption among small and micro firms, but success driven by education and entrepreneurial experience for those who join.
Private sector led innovations are expanding the menu of options for moving services online, but reach is limited.
A comprehensive digital ID framework – a low hanging fruit with huge potential returns
Fragmentation of data and systems & lack of coordination and leadership constrain digital transformation efforts.
What can be done?
1. Improve Digital Connectivity and Universalize Access

2. Make the Digital Economy Work for All

3. Use Digital Technologies to Upgrade Services

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Improve Digital Connectivity and Universalize Access

Make the Digital Economy Work for All

Use Digital Technologies to Upgrade Services

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Improve connectivity & universalize access

→ Optimize spectrum allocation for mobile broadband
Improve connectivity & universalize access

- Optimize spectrum allocation for mobile broadband
- Strengthen the sharing of active and passive infrastructure
Improve connectivity & universalize access

- Optimize spectrum allocation for mobile broadband
- Strengthen the sharing of active and passive infrastructure
- Strengthen competition along the broadband value chain
1
Improve Digital Connectivity and Universalize Access

2
Make the Digital Economy Work for All

3
Use Digital Technologies to Upgrade Services

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Make the Digital Economy Work for All

Support the development of logistics

Promote financial inclusion

Boost digital skills and skills for the new economy

Use tax policy instruments to ensure level playing field
1. Improve Digital Connectivity and Universalize Access

2. Make the Digital Economy Work for All

3. Use Digital Technologies to Upgrade Services

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Use digital technologies to upgrade services

- Develop a national digital ID framework
- Embrace a whole-of-government approach to digital transformation
- Move towards whole-of-government data integration and management
Thank You

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www.worldbank/digitalindonesia