What do developing countries need to build competitive advantages through e-commerce and the digital economy?

Helani Galpaya
First Intergovernmental Group of Experts on E-Commerce and the Digital Economy
UNCTAD
Geneva 4-6 October 2017

This work was carried out with the aid of a grant from the International Development Research Centre, Canada and the Department for International Development UK.
Basic building blocks for citizens to engage in e-Commerce transactions

• Connectivity
  – affordable ICTs

• Use
  – users and producers comfortable using ICTs
  – both able to use safely/securely

• Payment mechanisms
  – minimally, mobile wallet based payments (bCash, mPesa etc.) or Cash-on-Delivery
  – optimally, multiple modes of payment including credit/debit cards, digital wallets (such as PayPal), direct bank transfer
  – trust mechanism to build confidence in payment systems (consumer redressal mechanisms, customer service numbers to call, etc.

• Delivery mechanism and geo-mapping/addresses
  – minimally: easily accessible locations for goods pickup (e.g. mobile top-up shops)
  – optimally: multiple modes of delivery, with all all locations geo-mapped and “addressable”

• Legal and regulatory tools
  – consumer protection laws, electronic transaction laws, etc.
A range of e-Commerce activity takes place in emerging economies

<table>
<thead>
<tr>
<th>Type of market-enabling activity</th>
<th>Value to Economy</th>
<th>Requirements for Basic e-Commerce</th>
<th>Requirements for Frictionless e-Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listing + Searching</td>
<td>Low</td>
<td>ICT access + ICT use + basic digital skill</td>
<td>+ higher digital skill + some trust mechanism</td>
</tr>
<tr>
<td>Listing + searching + paying</td>
<td>Medium</td>
<td>Above + mobile payment OR Cash on Delivery</td>
<td>+ multiple payment options + insurance or “trust”</td>
</tr>
<tr>
<td>List &amp; Search + Pay + Deliver</td>
<td>High</td>
<td>Delivery points</td>
<td>+ geo mapped addresses + low non-tariff barriers (customs)</td>
</tr>
</tbody>
</table>
ACCESS & USE
Many S Asian countries had less than 20-30% of their population online. But newer data is essential.

- Ownership of a smart phone is key driver of Internet use.
- Most of these countries have around 30% smart phone penetration.

Source: ITU, 2013
Nationally representative data from Africa countries was even worse. But 2012 data is outdated.

Those answering YES to “Do you ever use the Internet?” (% of population aged 15 and above)
Compare with the exception in Asia – Myanmar. 48% of population own a smart phone. 49% of mobile owners online (in 2016)

Mobile handset type (% of mobile owners)

- Own smartphone only (76%)
- Keypad phone only (22%)
- Smartphone and keypad phone (2%)

Use of mobile data for Internet (% of mobile owners)

- Used mobile data (49%)
- Not used mobile data (51%)

Base: Mobile owners aged 15-65
Source: Nationally representative survey in Myanmar (Jun-Aug 2016)
In the context of low digital skills. Many in Myanmar manage with someone’s help

Digital skills (% of mobile handset owners who can perform the tasks by themselves or with help)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Can, with help from someone else</th>
<th>Can, by myself</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search for information or other content on the Internet/online</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Install an application ('app')</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>Create log-in details (user) and a password</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Locate and adjust settings on an application or service</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>Post any information online</td>
<td>7</td>
<td>21</td>
</tr>
</tbody>
</table>

Q: Can you please tell me, which of the following activities you have ever done on your mobile or on the Internet/online, and for each one, whether you have done it by your self, or with someone else’s help.

Base: Mobile owners aged 15-65

Source: Nationally representative survey in Myanmar (Jun-Aug 2016)
Nationally representative data from Latin America shows huge progress in Internet use by 2017

Internet and Social Media use by population aged 15 years or above, July 2017

<table>
<thead>
<tr>
<th>Country</th>
<th>Internet Users</th>
<th>Social Media Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>75%</td>
<td>70%</td>
</tr>
<tr>
<td>Colombia</td>
<td>78%</td>
<td>87%</td>
</tr>
<tr>
<td>Guatemala</td>
<td>61%</td>
<td>58%</td>
</tr>
<tr>
<td>Paraguay</td>
<td>53%</td>
<td>52%</td>
</tr>
<tr>
<td>Peru</td>
<td>71%</td>
<td>65%</td>
</tr>
</tbody>
</table>

ICT skills data also available in these surveys, and being analyzed.

Question 1: Have you ever used the internet in your mobile phone, computer or any other device? (explain and give examples: Facebook, WhatsApp, mail, google, YouTube, Hotmail, etc.)

Question 2: Do you use social media like Facebook, WhatsApp, twitter, etc.?

Source: Nationally representative surveys in each country carried out between April-July 2017 by DIRSI (www.dirsi.net)
Use of mobile money or mobile banking is low in 5 LATAM countries surveyed (Argentina, Colombia, Guatemala, Paraguay, Peru)

Use of mobile money/wallet/banking by those aged 15 years or above, July 2017

- 83% No
- 11% Yes, mobile money (For example: mobile wallet)
- 5% Yes, mobile banking - mobile banking apps.
- 1% Yes, both

Question 1: Question: Do you ever use mobile money services (mobile phone for financial transactions) to send or receive money?

Source: “The Next Billion”, Nationally representative surveys conducted by DIRSI in Latin America between April- July 2017
Total use driven by Paraguay

Use of mobile money/wallet/banking by those aged 15 years or above, July 2017

Question 1: Question: Do you ever use mobile money services (mobile phone for financial transactions) to send or receive money?

Source: “The Next Billion”, Nationally representative surveys conducted by DIRSI in Latin America between April- July 2017
Older (2012) data from Africa shows East Africa leading in the use of mobile money.
INCIDENCE OF E-COMMERCE
Very low use of online buying/selling in the 5 Latin American countries surveyed (Argentina, Colombia, Guatemala, Paraguay, Peru)

Frequency of using e-Commerce apps (that enable buying and selling of goods and services) by those aged 15 or above in 5 Latin American countries. July 2017

Source: “The Next Billion”, Nationally representative surveys conducted by DIRSI in Latin America between April- July 2017 N = 4773
POLICES & REGULATION
17,000 – 22,000 people engaged in online freelancing/microwork in Sri Lanka. Selling their skills on platforms

- National survey and calculations show **17,000 – 22,000 people in Sri Lanka do online freelancing**
- Many work part time (e.g. 2-3 hours per week) to supplement income
- Most have 3 – 6 months of education (diplomas in computer science) after completing high school
  - Computer literacy and internet connections as basic needs
- Average income per person nationally: Approx. 180/month (Dept. of Census and Statistics)
- Average earnings from online freelancing USD 140 per month
- Most not willing to do full-time
  - Inability to prove income when asking for a loan
  - “I need to go into an office”
  - “I can’t explain what I do to my parents”
Sri Lankan workers do a range of work, requiring varying skill and yielding varying income. But only a few reach the high ends.

Micro-tasks: low skill, low earning
- Ad-clicking (E.g. ClicxSense, Gigabucks), image tagging
- Low earning (USD 0.1 per job)
- Buyer specifies price (worker is price taker)
- Low skill needed
- No payment if buyer not satisfied

Task based, but higher earning and higher skill
- Logo design: Content writing, review writing
- Avg. US$ 5 - 10 per job
- Avg. USD 8 – 15 per month (work 2-5 hours)
- Ratings on platform important
- Potential to develop repeat relationship w/buyer

Project-based, high skill, higher earning
- E.g. Software/website dev
- Direct relationship with client (off-platform)
- Ability to negotiate price
- Up to USD 300 per project; Up to USD 1000 per month
- “Right place to use our skills”
- No issues getting paid
Getting paid is the biggest challenge

- PayPal: Default payment mechanism on most platforms.
- Sri Lanka doesn’t allow PayPal to operate
  - Couldn’t show that it would meet the KYC (Know Your Customer) requirements imposed on financial institutions by the Central Bank.
- Some platforms offer alternatives: high-fee charging “debit” cards
  - “Payoneer” card
- Others rely on goodwill of friends who have overseas bank accounts
- Other freelancers go to great lengths to “cheat” the system
  - Hack the IP address, pretend they live in Malaysia/other country where PayPal is legal
- Others only realize they can’t get paid after working for a year
  - For low-value jobs like ad-clicking, minimum USD 1000 has to be earned before cashing out on some platforms
- Negative consequence: Income loss to workers + foreign revenue loss to the nation
WHERE’S THE DATA TO MEASURE MEANINGFUL PROGRESS?
Old data was shown. Not the basis for decision-making or diagnosis

- Supply-side data only tells so much
  - E.g. Operator SIM penetration numbers don’t tell how many people own more than one SIM. So penetration always looks better than it is
  - Only demand-side data (surveys) will tell
- Demand-side data of the type that was shown (national surveys) are expensive
  - LIRNEasia, RIA, DIRSI: research organizations filling a vacuum.
  - The data should be collected by national statistical organizations (frequently, as part of other surveys)
- Then, researchers can do more in-depth research through qualitative (ethnographies, focus groups, etc.) methods
  - E.g. gender differences in e-Commerce participation
Until then, nationally representative surveys being done by LIRNEasia, RIA, DIRSI

- Field-work underway or completed. Results will start coming out December 2017
- 6 countries in Asia
  - India, Bangladesh, Pakistan, Cambodia, Indonesia, Nepal.
- 6 countries in Africa
  - South Africa, Nigeria, Ghana, Tanzania, Kenya, Rwanda, Mozambique
  - Includes Informal Business survey too (nationally representative)
- 5 countries in Latin America
  - Argentina, Columbia, Guatemala, Paraguay, Peru
- Questions on ICT access, ICT use, financial transactions, online buying/selling, digital labour, online privacy/security/harassment
A range of e-Commerce activity takes place in emerging economies.

<table>
<thead>
<tr>
<th>Type of market-enabling activity</th>
<th>Value to Economy</th>
<th>Requirements for Basic e-Commerce</th>
<th>Requirements for Frictionless e-Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listing + Searching</td>
<td>Low</td>
<td>Delivery points</td>
<td>+ higher digital skill + some trust mechanism</td>
</tr>
<tr>
<td>Listing + searching + paying</td>
<td>Medium</td>
<td>payment OR Cash on Delivery</td>
<td>+ multiple payment options + insurance or “trust”</td>
</tr>
<tr>
<td>List &amp; Search + Pay + Deliver</td>
<td>High</td>
<td></td>
<td>+ geo mapped addresses + low non-tariff barriers (customs)</td>
</tr>
</tbody>
</table>

Developing countries need: All this + Data!!!
OUR SURVEY DATA AVAILABLE AFTER DECEMBER 2017 AT:

- [www.lirneasia.net](http://www.lirneasia.net) and helani[at]lirneasia.net (for Asia survey data)
- [www.researchictafrica.net](http://www.researchictafrica.net) (for Africa survey data)
- [www.dirsi.net](http://www.dirsi.net) (for Latin America survey data)