



UNCTAD Project on Measuring Exports of ICT-enabled Services (Digitally-delivered Services)

Diana Korka

(diana.korka@unctad.org)

ICT Policy Section

Division on Technology and Logistics

UNCTAD

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UNCTAD INFORMATION ECONOMY REPORT 2017



Digitalization, Trade and Development

- focus on the development dimension of the digital economy
 - opportunities and risks
 - existing & emerging digital divides, who benefits and who is at risk of being left behind
 - policy challenges
- Top 10 economies by total B2B and B2C e-commerce
- Estimates of cross-border online B2C purchases for the top 10 importers
- Available to download free of charge at www.unctad.org/ier.



UNCTAD INFORMATION ECONOMY REPORT 2017



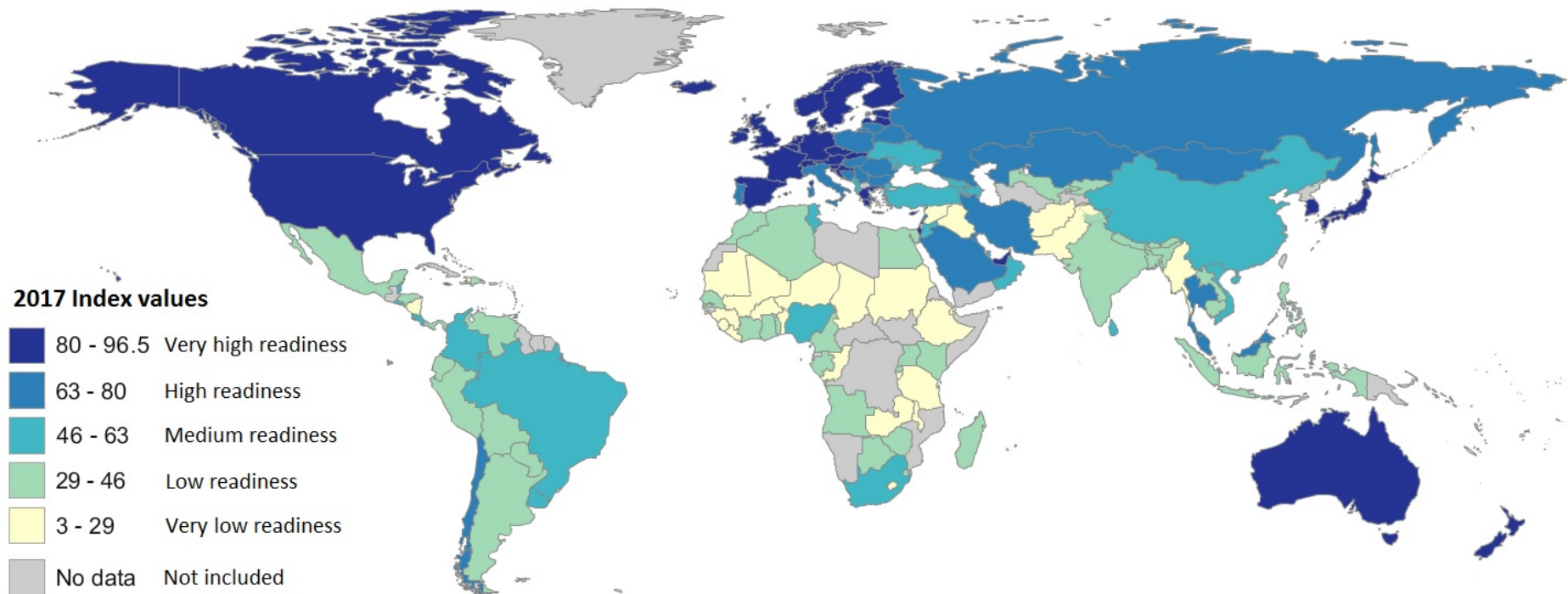
Conclusions of the data chapter - more & better data needed

- to ensure that everyone can benefit from the digital economy >> essential to collect and compile policy-relevant data and statistics on the digital divide
- it is possible to estimate and use proxies but
- most developing countries currently do not compile official statistics on the digital economy
- existing data are often not comparable, do not adhere to international classifications, do not provide the necessary level of detail
- >> the implications of the evolving digital economy for low- and middle-income countries are not adequately researched

ASSESSING E-COMMERCE READINESS (1)

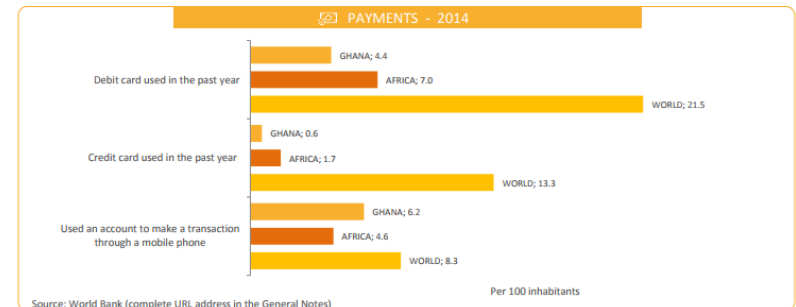
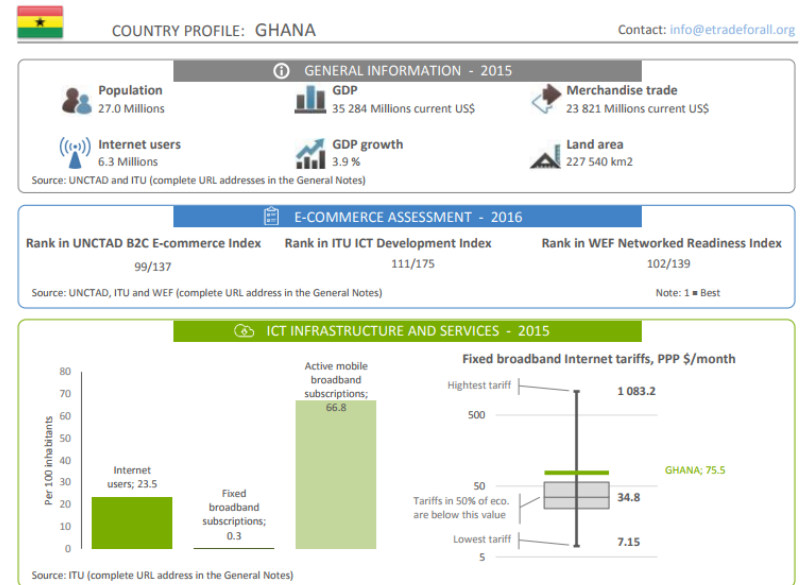
- UNCTAD B2C E-commerce Index 2017

>>more data on readiness indicators, but little data on the value of e-commerce



ASSESSING E-COMMERCE READINESS (2)

- eTrade for all, <https://etradeforall.org/>
- eTrade country profiles
- Joint project with the World Bank, World Economic Forum, International Telecommunication Union and Universal Postal Union
- + 144 economies
- Update in April 2018





INFORMATION ECONOMY STATISTICS - WORKING TOGETHER

- UNCTAD works on measuring the information economy, with the **Partnership on Measuring ICT for Development**
 - Size of ICT sector
 - Use of ICT by enterprises
 - Trade in ICT goods
 - Trade in ICT services and ICT-enabled services
- Collaboration with the **Inter-Agency Task Force on International Trade Statistics (TFITS)**
- Joint initiative with WTO, UPU and OECD on measuring cross-border e-commerce
- Member of the WCO working group on measuring e-commerce



UNCTAD-TFITS MEASURING INTERNATIONAL TRADE IN ICT-ENABLED SERVICES

- **Background and motivation for the project**
- services becoming more tradable > main enabling factor =ICT > less costly, more ubiquitous, rapid technological advances
- more developing countries become importers & exporters of services that are ICT-enabled > they evolve from basic call centers to business process, system design etc. delivered remotely over ICT networks
- no existing statistics to capture this mode of delivery
- several proxies and alternative definitions
- demand for better data from countries exporters of such services
- linked to need to better understand the impact of ICT access and use on services trade
- trade negotiations: renewed interest in services and e-commerce

UNCTAD-TFITS MEASURING INTERNATIONAL TRADE IN ICT-ENABLED SERVICES

- **Goal:** develop indicators & practical proposals on how to collect country-level data
- In collaboration with the Partnership and TFITS, **initial stock-taking of existing approaches** such as at NASSCOM, Everest Group, ITU, WTO, US BEA, Costa Rica Ministry of Foreign Trade
- **Definition and methodology:** UNCTAD Technical Note on International Trade in ICT Services and ICT-enabled Services, TN/UNCTAD/ICT4D/03
- **United Nations Statistical Commission** reviews and adopts definition, 47th session (March 2016)
- **Model survey questionnaire** - developed in 2016
- **Pilot implementation** in 3 developing countries during 2017 with technical assistance from UNCTAD
- 28-29 Nov 2017 UNCTAD expert meeting on **lessons learned**
- **Funding by the Government of Sweden**



DEFINITION

- **Potential** ICT-enabled services/ **Digitally-deliverable** = services with outputs that can be delivered remotely over ICT networks
 - using detail in CPC Ver.2.1 and the correspondence to EBOPS 2010
 - Exclude transport services (involve manipulation or transport of people, physical objects, material, or electricity)
 - Exclude on-site or in-person services (require on-site or personal delivery)
- **Actual** ICT-enabled services are **similar to Mode 1** (GATS) cross-border supply for the selected services / **Digitally-delivered** >>> survey question asks for share of services delivered over ICT networks
- Given the lack of data by mode of supply (WTO GATS) a survey-based approach was preferred for producing the statistics
- For example: a firm delivers bookkeeping and accounting services by email/dedicated Internet platforms to a customer in a foreign country

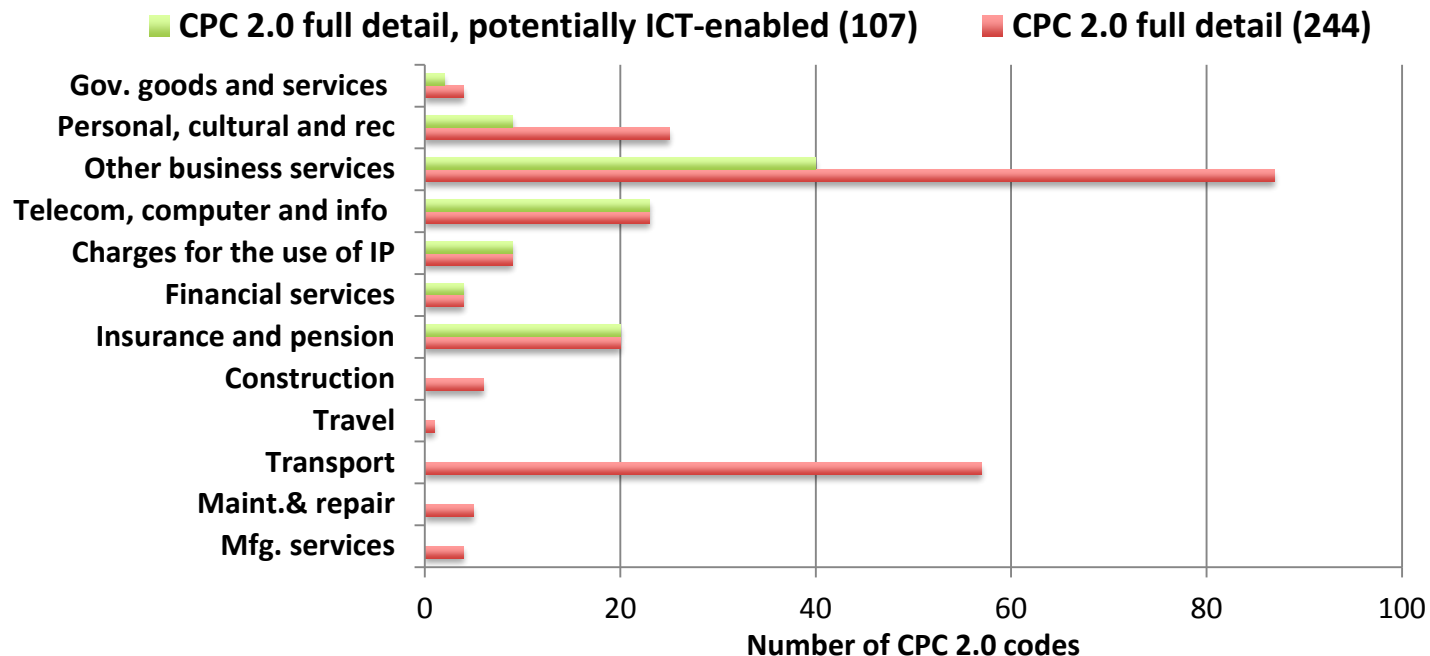


METHODOLOGY

- ❑ 1st step: look at existing measurement frameworks and identify and **define the types** of services that can be ICT-enabled >>> a taxonomy of such services using the most detailed international classification of services CPC Ver.2.1 >>> list of *"potential ICT-enabled services"* building on existing concepts, methods and classifications
- ❑ 2nd step: it matters **how** these services are actually **delivered** >>> need to develop a survey question on how the service was delivered >>> similar to WTO GATS mode 1 of supply >>> *"actual ICT-enabled services"*
- ❑ Focus the pilot surveys on **exports** of services, as smaller population of firms to survey, easier data collection
- ❑ The survey approach is different from the simplified allocation by mode of delivery in MSITS (2010)

In existing trade in services data, under which EBOPS headings would potential ICT-enabled services be included?

- EBOPS not amenable for easily identifying digitally-deliverable services



Source: UNCTAD ICT4D Technical Note 3, derived from UNSD "Correspondence between the EBOPS 2010 and the Central Product Classification (CPC, version 2) - Detailed version"

NEW COMPLEMENTARY GROUPING FOR TRADE IN ICT-ENABLED SERVICES

- "ICT-enabled services" more comprehensive coverage than "call centers" or "business process outsourcing (BPO)"

Categories for measuring trade in ICT-enabled services		
1.1 Telecommunications	ICT services	Potential ICT-enabled services
1.2 Computer services (including computer software)		
1.3 Sales and marketing services, not incl. trade and leasing services		
1.4 Information services	Other potential ICT-enabled services	
1.5 Insurance and financial services		
1.6 Management, administration, and back office services		
1.7 Licensing services		
1.8 Engineering, related technical services, research and development (R&D)		
1.9 Education and training services		



QUESTIONNAIRE FOR SERVICES EXPORTING FIRMS

- Building on the 2011 BOP Census of ITS at Statistics New Zealand

9 How were your ICT services delivered?

Note: For each country column, please estimate a percentage breakdown on how the services were delivered to the client (see section 6 of the guide).

Delivered from New Zealand to a customer overseas eg by Internet, phone, mail.	%	%
Delivered to an overseas customer by a New Zealand employee, temporarily working abroad.	%	%
Delivered to an overseas customer, temporarily in New Zealand.	%	%
Total	1 0 0 %	1 0 0 %

- And on the IMF model survey forms (BPM6 Appendix 8)
- Focus on mode 1 / cross border supply / % of services delivered abroad over ICT networks
- With services categories according to the new complementary grouping and defined using the full detail in CPC Ver.2.1



ICT-ENABLED SERVICES: EXPECTED OUTCOMES

CATEGORY SERVICE	VALUE OF EXPORTS	
	MODE 1 (DELIVERED DIGITALLY)	TOTAL EXPORTS
Telecommunications		
Computer services		
Sales and marketing services, not including trade and leasing services		
Information services		
Insurance and financial services		
Management, administration and back office services		
Licensing services		
Engineering, related technical services and R&D		
Education and training services		

- By partner country, by enterprise size, by principal economic activity
- Including information on foreign ownership and total turnover



PRELIMINARY TAKE-AWAYS FROM PILOT SURVEY IMPLEMENTATION IN 2017

- Strong project ownership by the national agencies in charge of implementing the survey >> each developed own implementation strategy
 - Online survey questionnaire developed by the Central Bank of Costa Rica
- Response rate: 65% in Costa Rica (285 enterprises included in the sample), 72% in India (2485 ent.incl.), 86% in Thailand (14 telecommunications ent. incl.)
- Collaboration with the private sector is important>> organize a half a day meeting to explain the survey and expected results to the target enterprises
- Identifying the sampling frame - can be challenging (lack of business register, lack of BOP register, data sharing) but solutions can be found
- Interest from all 3 countries to conduct comprehensive surveys in 2018



NEXT STEPS - ICT-ENABLED SERVICES

- Make adjustments to survey questionnaire as required
- UNCTAD will prepare a detailed report on lessons learned from pilot survey implementation - April 2018
- Explore ways to scale up with a view to collect data in many more countries, especially developing countries
- Explore funding opportunities/partnerships



UPCOMING MEETINGS - SAVE THE DATE

- UNCTAD E-Commerce Week, 16-20 April 2018
 - Measurement session on Monday 16 April from 3 p.m. - focus on results from the pilot surveys on exports of ICT-enabled services - presentations by Costa Rica, India and the US Bureau of Economic Analysis
- UNCTAD Intergovernmental Group of Experts on E-commerce and Digital Trade, 18-20 April 2018
- Request to create an UNCTAD Working Group on Measuring E-commerce, fall 2018 (to be confirmed)



MORE AND BETTER STATISTICS ON DIGITAL TRADE ARE NEEDED

- What are future plans to improve data availability/ what are new areas of demand for better data?
- Where should technical assistance focus for better and faster results?
- What kind of activities would donors be ready to support to improve the data availability?



FURTHER ONLINE RESOURCES

- *UNCTAD Information Economy Report 2017: Digitalization, Trade and Development*
- *UNCTAD Information Economy Report 2015: Unlocking the Potential of E-commerce for Developing Countries*
- UNCTAD B2C E-commerce Index 2017. *UNCTAD Technical Notes on ICT for Development N°9*. TN/UNCTAD/ICT4D/09
- In Search of Cross-Border E-commerce. *UNCTAD Technical Notes on ICT for Development N°6*. TN/UNCTAD/ICT4D/06
- International Trade in ICT Services and ICT-enabled Services: Proposed Indicators from the Partnership on Measuring ICT for Development (TN/UNCTAD/ICT4D/03)
- unctad.org/ict4d/technicalnotes
- unctadstat.unctad.org