



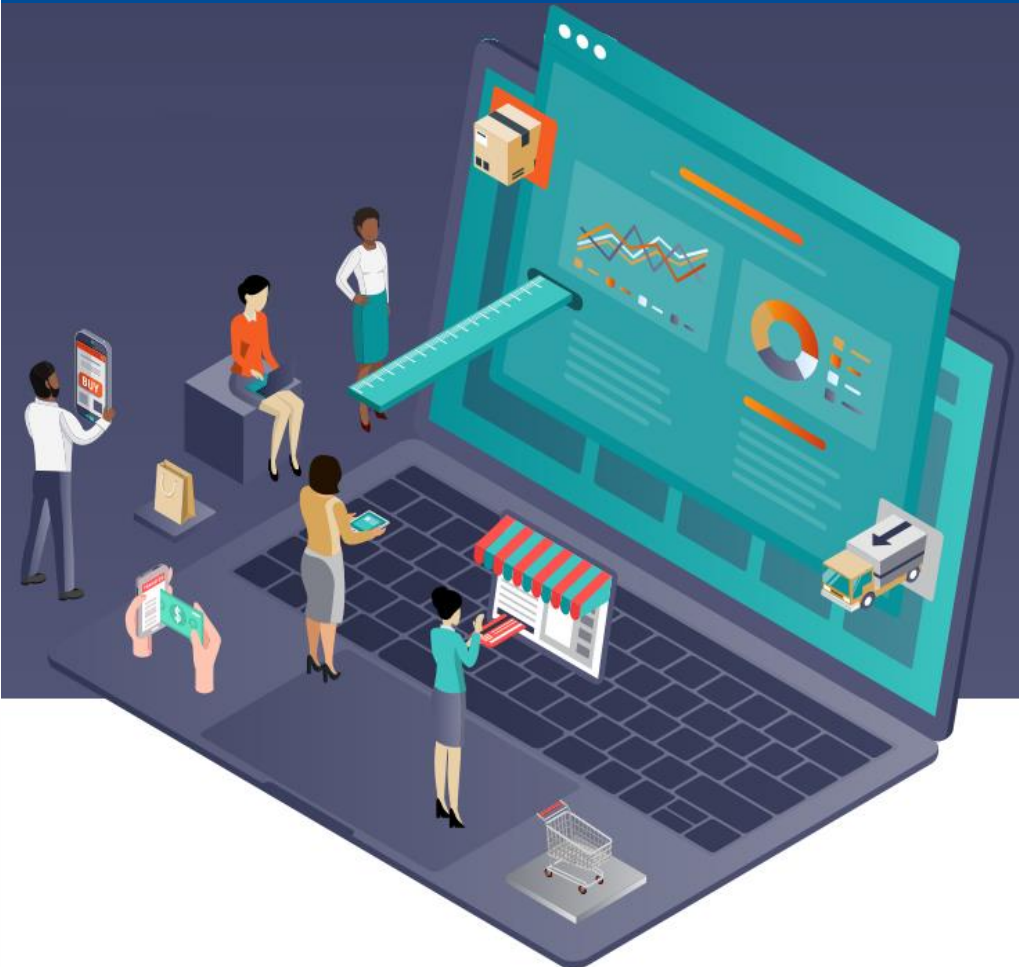
STATISTICS

Measuring Digital Trade

The 10th Meeting of the Technical Committee of
the Arab Statistics Initiative

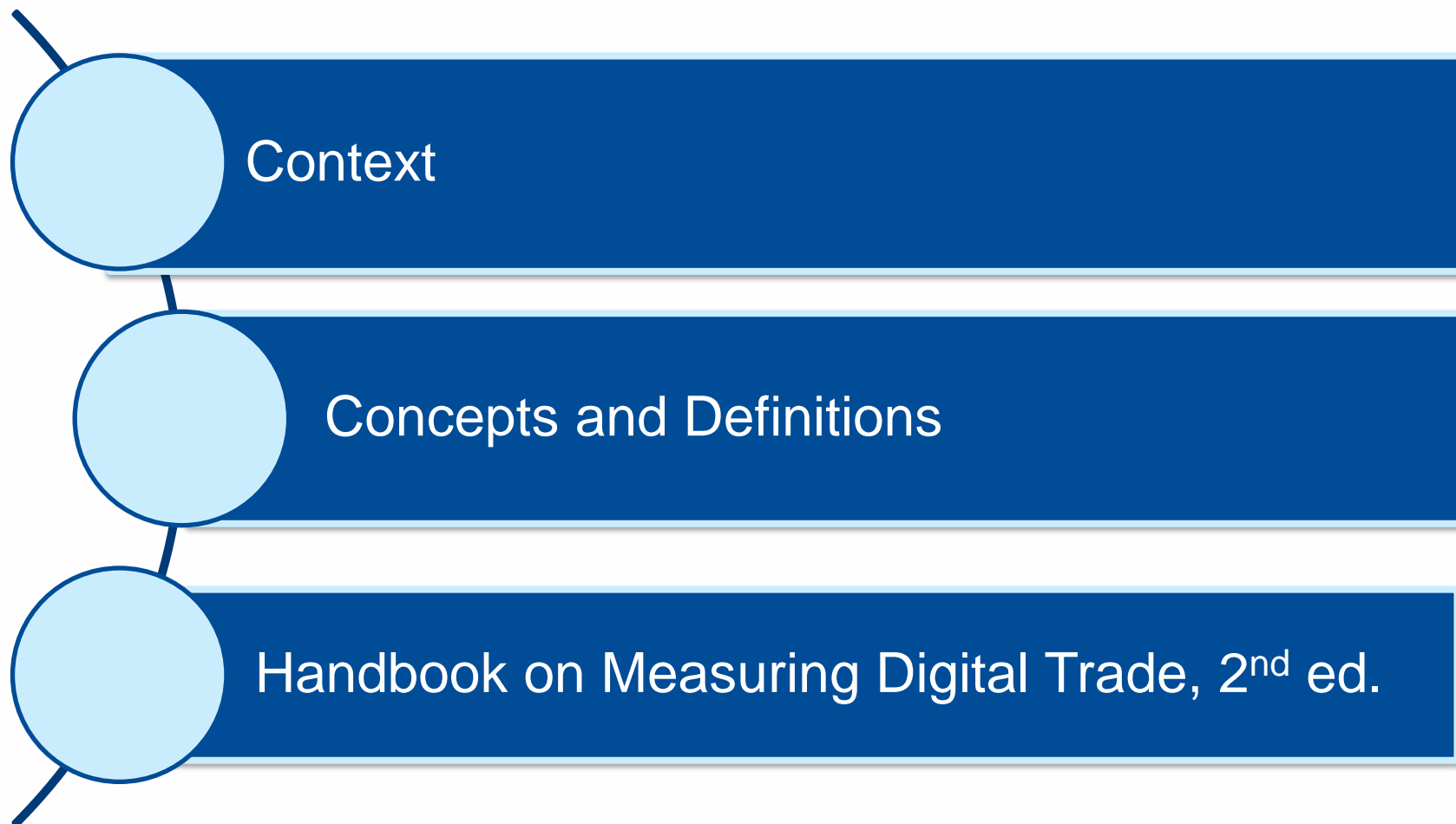
November 9, 2023

Ms. Kristy Howell, Deputy Division Chief
Balance of Payments Division
Statistics Department



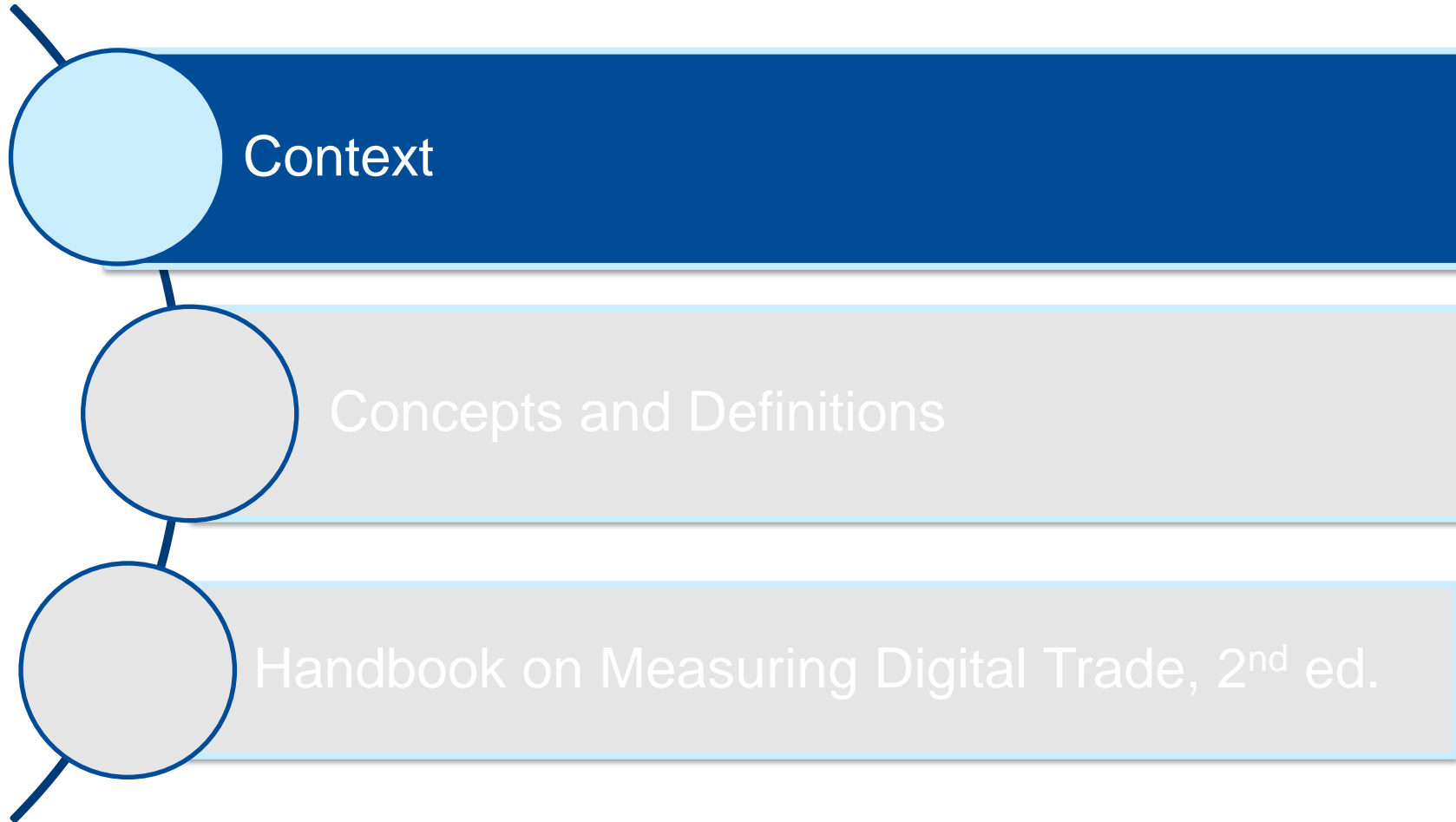
The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management.

Outline





Outline



Context: Rise of digitalization



Generative AI



Cloud Computing



Data



Digital Intermediation
Platforms

Today, half the world's population is online, a third are on a social network, 53% are mobile, and they span all ages, races, geographies and attitudes across the planet.

Source: Forbes, The Digital Economy In 5 Minutes, 2016

The World Bank estimates that the digital economy contributes to more than 15% of global gross domestic product (GDP), and in the past decade it has been growing at two and a half times faster than physical world GDP.

Source: World Economic Forum, Digital trust: How to unleash the trillion-dollar opportunity for our global economy, August 17, 2022

Policy questions

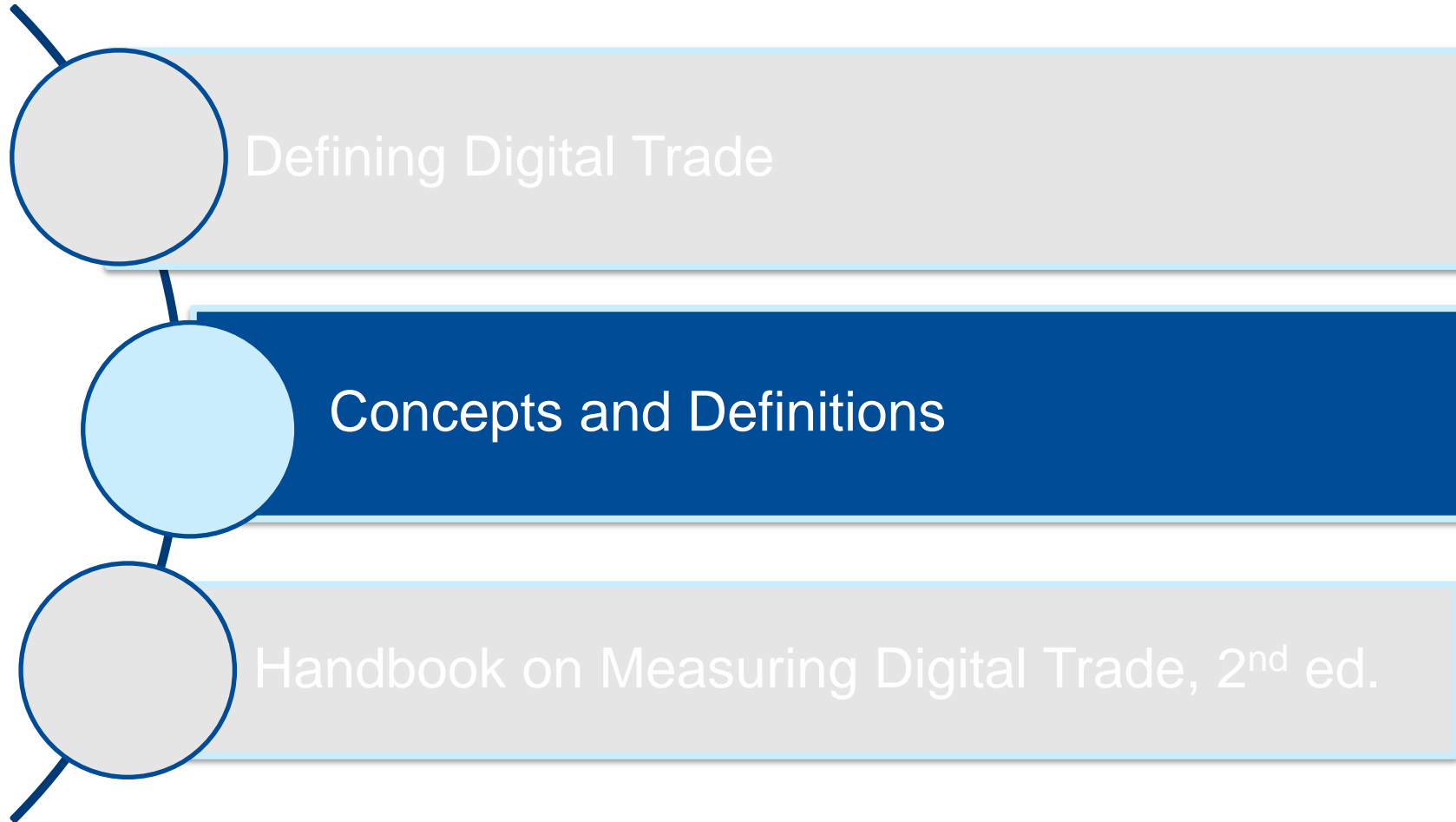
- Size and importance of digital flows – for GDP, but also for trade?
- Opportunities – for small- and medium-sized enterprises, developing countries?
- Barriers to digital trade – data localization, regulations, concerns about privacy?

At present, little cross-country comparable, detailed data are available to answer these policy questions.





Outline



Digital trade concepts

Digital trade is defined as:

“All international trade that is **digitally ordered** and/or **digitally delivered**.”

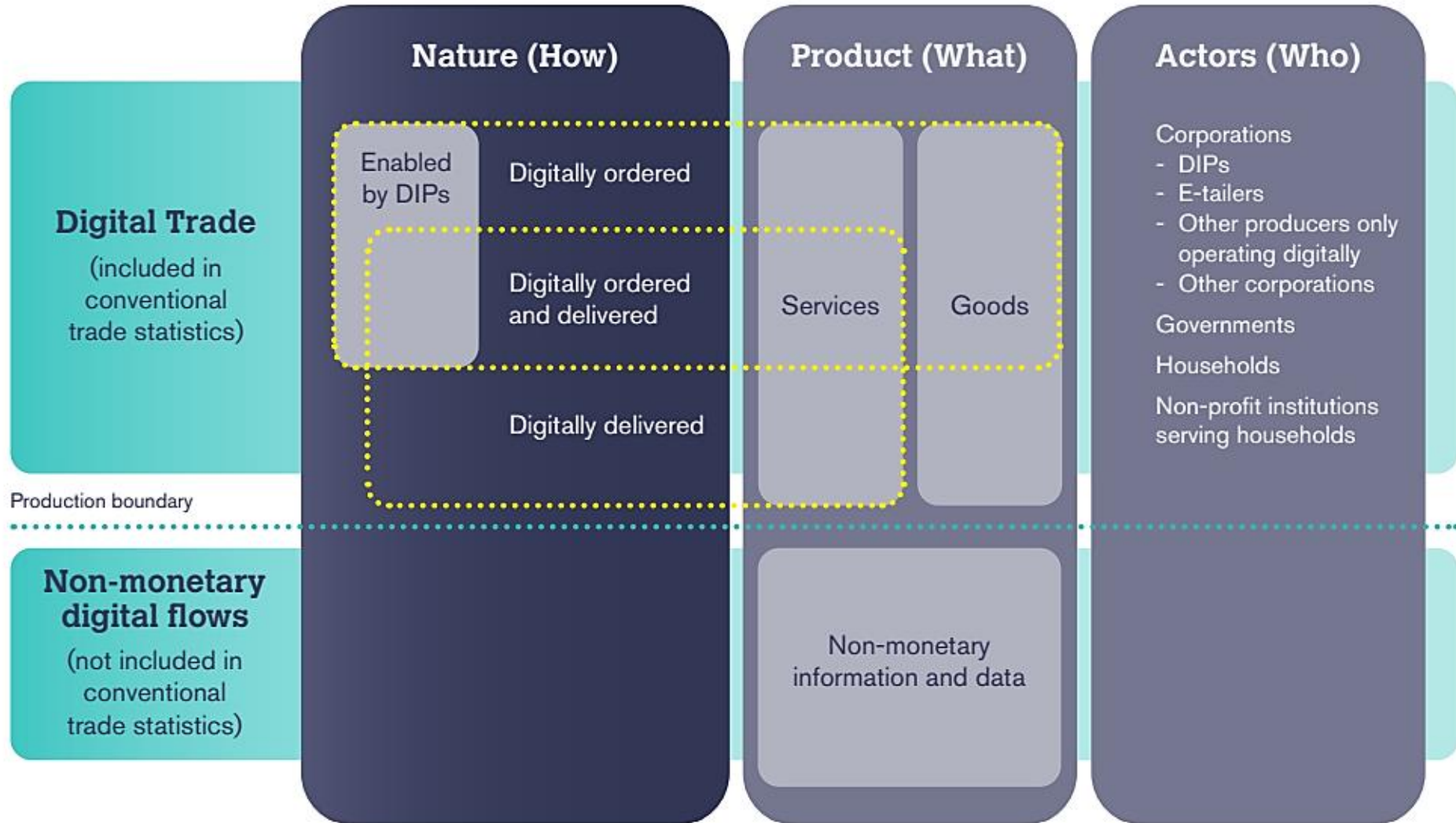
Digitally ordered international trade = International e-commerce:

“The international sale or purchase of a good or service, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders.”

Digitally delivered trade

“All international trade transactions that are delivered remotely over computer networks”

The statistical framework

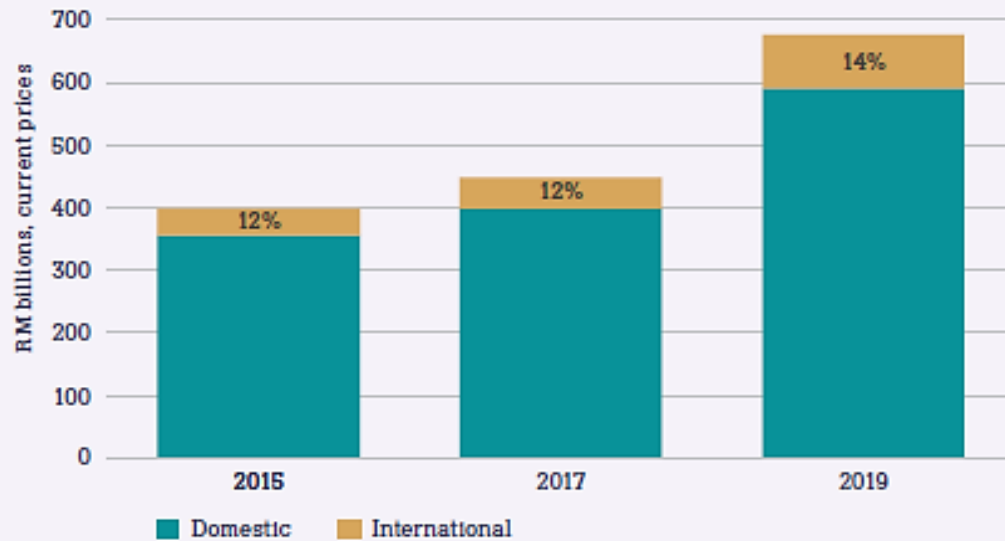


Digitally ordered trade = international e-commerce

- **Digitally ordered trade** covers:
 - ▶ Orders made over the internet, via an extranet or via electronic data interchange (EDI) (i.e., machine-to-machine) messages;
 - ▶ Orders placed through websites or apps via an “online shopping cart” or order form;
 - ▶ Orders made on an online marketplace or auction site;
 - ▶ Orders made via digital intermediation platforms.
- Orders made by phone, fax or manually typed email are excluded
- The payment and ultimate delivery of the goods or services do not also have to be conducted online.
- Digitally ordered trade transactions can involve participants from all institutional sectors, and all economic sectors can be buyers and sellers.

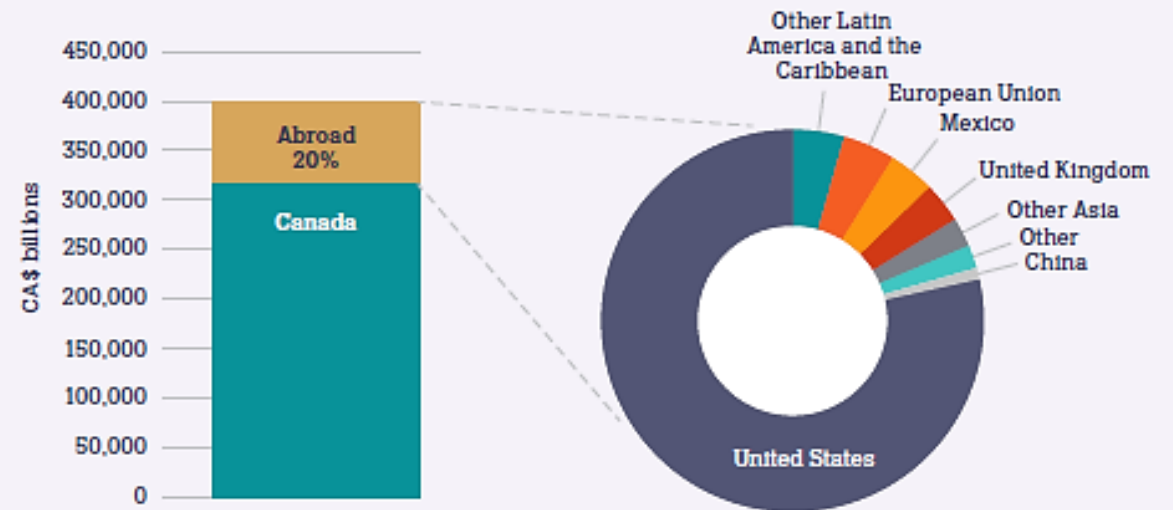
Case Studies: Business e-commerce sales by customer location

Figure 3.2: Business e-commerce sales by customer location, Malaysia



Source: IMF, OECD, UNCTAD and WTO based on Department of Statistics Malaysia (2019; 2021).

Figure 3.3: Business e-commerce sales by customer location, Canada, 2021



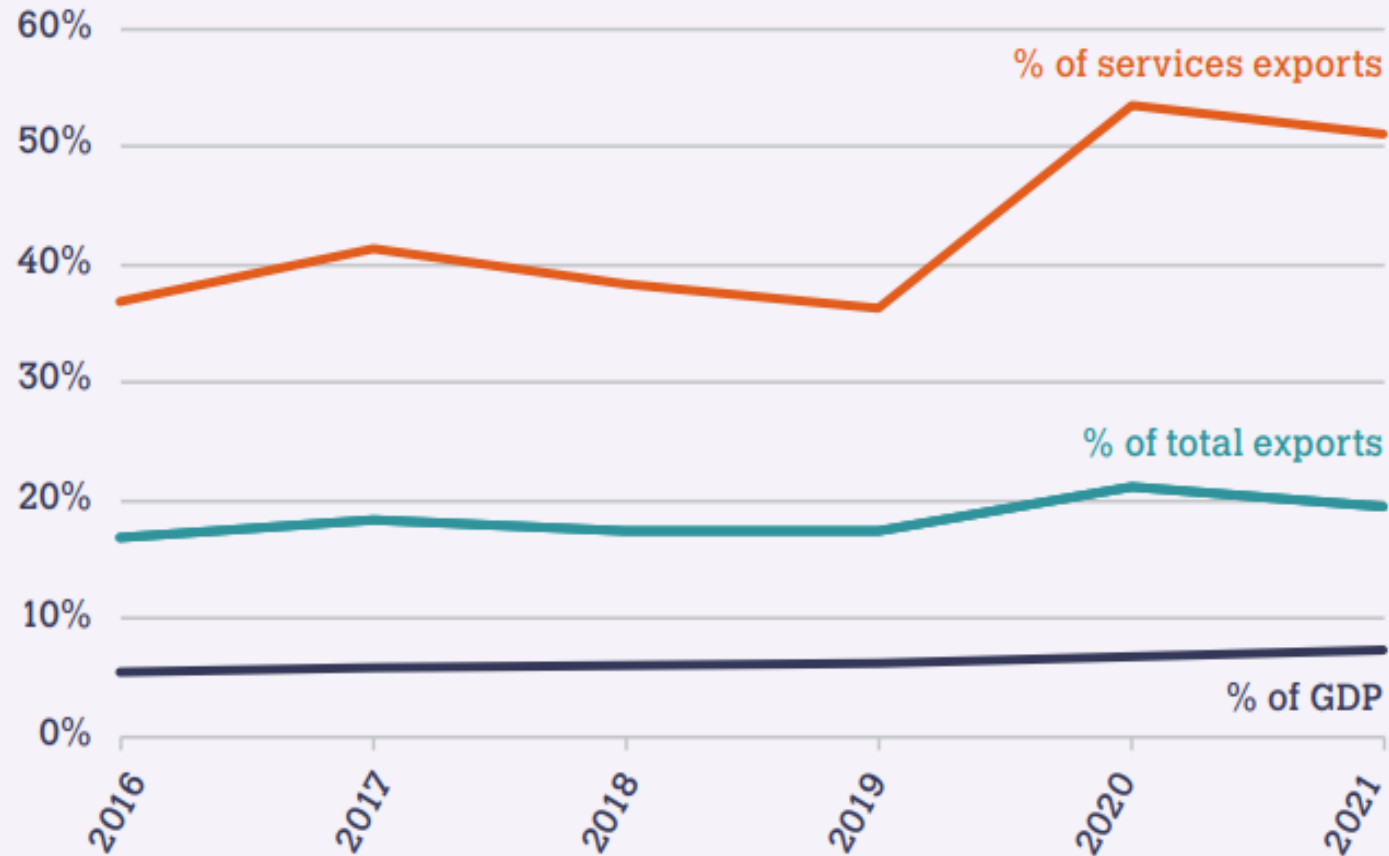
Source: Statistics Canada

Source: IMF, OECD, UNCTAD and WTO (2023)

Digitally delivered trade

- Digitally delivered trade is equivalent to Mode 1 cross-border supply for digitally deliverable services
- First step: Identify digitally deliverable services in the BOP
- Second step: What proportion are delivered via mode 1
- The second step is often approximated using past results or international factors
- Recommendation: collect sufficient service detail in EBOPS to provide digitally deliverable trade
- This method yield internationally comparable results and is used by many compilers

Case Study: Measuring digitally delivered services in Costa Rica



Note: Excludes health services, education services, heritage and recreational services, and trade-related services.

Source: Central Bank of Costa Rica.

Source: IMF, OECD, UNCTAD and WTO (2023)

DIPs intermediate transactions

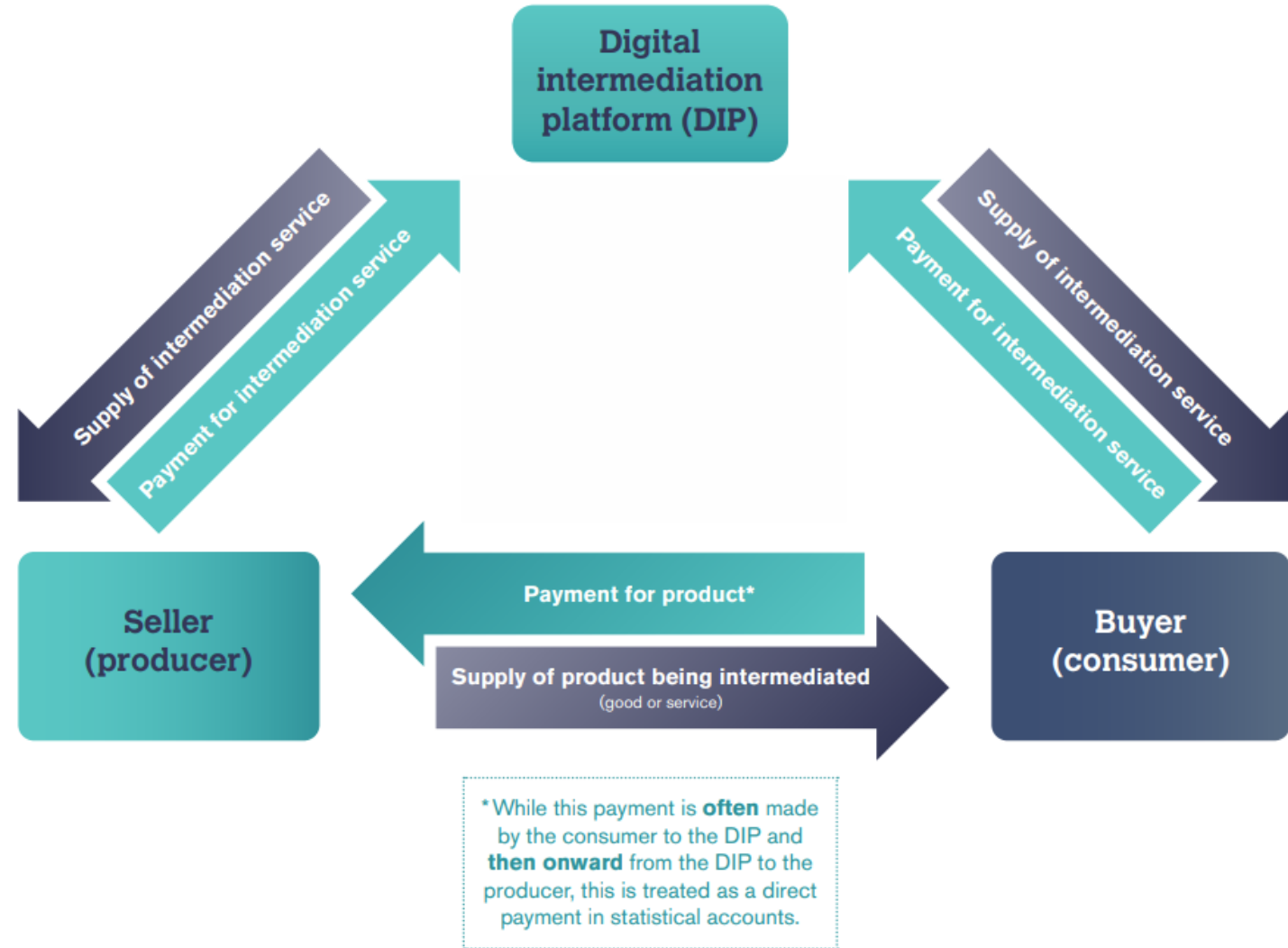
Buyer purchases from seller via DIP

- Often:
 - ▶ Buyer pays DIP
 - ▶ DIP subtracts fees
 - ▶ DIP pays remainder to seller
- Economic reality:
 - ▶ Payment from buyer to seller for good/service
 - ▶ Payment(s) from seller and/or buyer to DIP for the digital intermediation service it provided

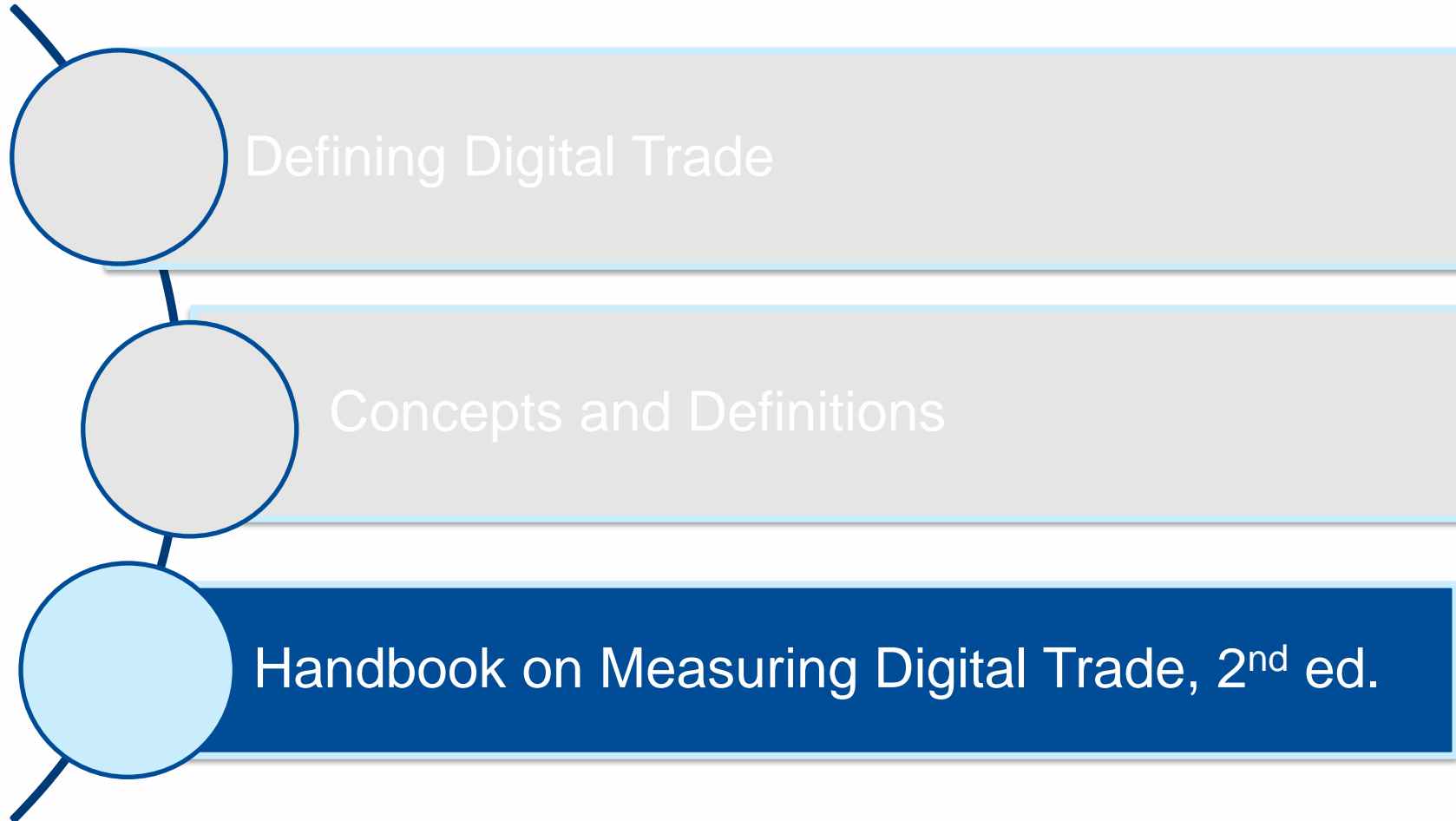
Buyer/seller/DIP resident in different economies = trade transactions

Limited country measurement experience, Handbook recommends:

- collecting information from resident DIPs using enterprise surveys
- collecting information on transactions made via DIPS using ICT Usage surveys
- using other sources (e.g. card payment data) to focus on major DIPs



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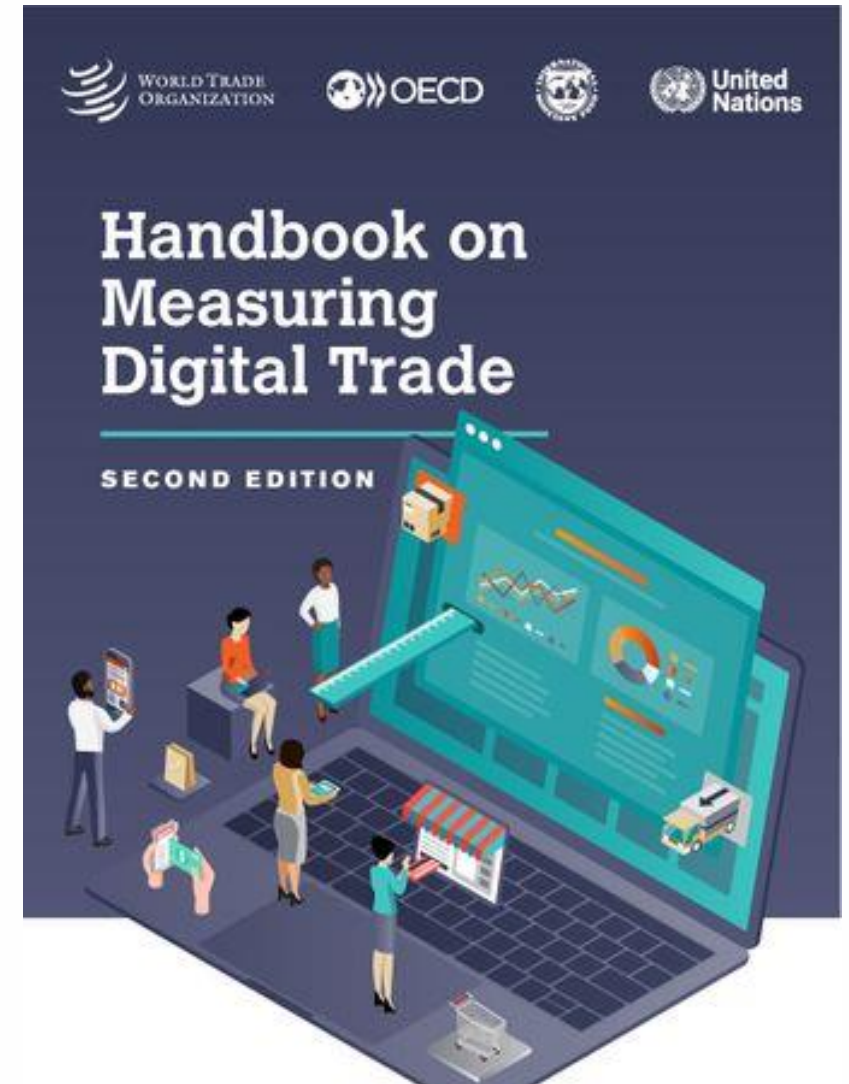
Handbook on Measuring Digital Trade, 2nd Ed.

The [Handbook on Measuring Digital Trade](#) sets out key definitions, a measurement framework, and reporting template for digital trade statistics

- 2nd edition adds important clarifications and explanations and presents extensive new compilation guidance reflecting the rapid progress being made by countries
- It has been endorsed by countries through global consultation
- Arabic version forthcoming

[WTO/UNCTAD/OECD/IMF/AMF Regional Workshop on Measuring Digital Trade](#)

- Abu Dhabi, November 20-23, 2023
- Including Arabic translation



Questions

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