

Measuring e-commerce – household surveys and beyond

Fourth meeting of the working group on measuring e-commerce and the digital economy, fourth meeting | 30 November 2023

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Partnership on Measuring ICT for Development



Partnership activities in 2023/24



Emphasis on timely and disaggregated data

2023 activities

Organized a Partnership session during **WSIS Forum 2023**

Submitted an input to the **High-level Political Forum on Sustainable Development (HLPF)** in July 2023

Submitted an input to the **Global Digital Compact** online consultation

Planned 2024 activities

Preparing a report to the **UN Statistical Commission** 55th session in March 2024

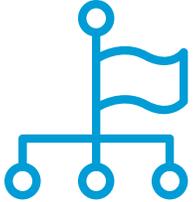
Forum for Director General of National Statistical Offices (NSOs)

Item on ICT statistics - Discuss and endorse work of the Partnership and indicators

For 2024, prepare for comprehensive review of the **SDG Global Indicator Framework**

Partnership Thematic list of ICT indicators

Breadth of ITU data collection



Three main areas

ITU collects, verifies, harmonizes, and analyses telecommunication/ICT statistics - more than 200 economies worldwide

Household

Includes indicators on:

- Household access to television, computer, Internet
- Individual Internet use (overall, by frequency, activity)
- Mobile phone ownership and use
- ICT skills

Administrative

Includes indicators on:

- Mobile-broadband coverage, by type
- Mobile- and fixed-broadband subscriptions
- Bandwidth use

Prices

Price baskets for

- Data-only mobile-broadband
- Fixed-broadband
- Mobile data and voice (high and low consumption)
- Mobile voice and SMS (low usage)

New: Big Data sources (eg, mobile phone data)

ICT data collection



Supply-side data

Primary source:
telecom operators

Compiled by:
Regulators/Ministries

Examples of indicators

- Subscriptions
- Coverage
- Traffic
- Prices

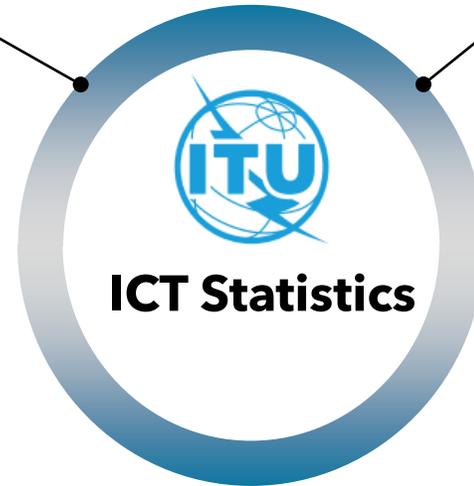
Other sources:

ITU's RME: Telecom regulation, tariff policies

UNCTAD: ICT use by businesses

UNICEF: School connectivity

....



Demand-side data



Primary source:
household surveys

Compiled by:
National Statistical Offices

Examples of indicators:

- Household with Internet
- Device ownership
- Digital skills
- Online activities
- Barriers to connectivity

Establishing a common framework



ITU expert groups

Expert Group on ICT Household Indicators (EGH)

Reviews existing and develops new indicators on household ICT access and individual ICT use

Decides on demand-side ICT indicators to be collected through the ITU statistical questionnaires on access and use by households and individuals.

Expert Group on Telecommunications Indicators (EGTI)

Reviews existing and develops new telecommunication/ICT supply-side indicators

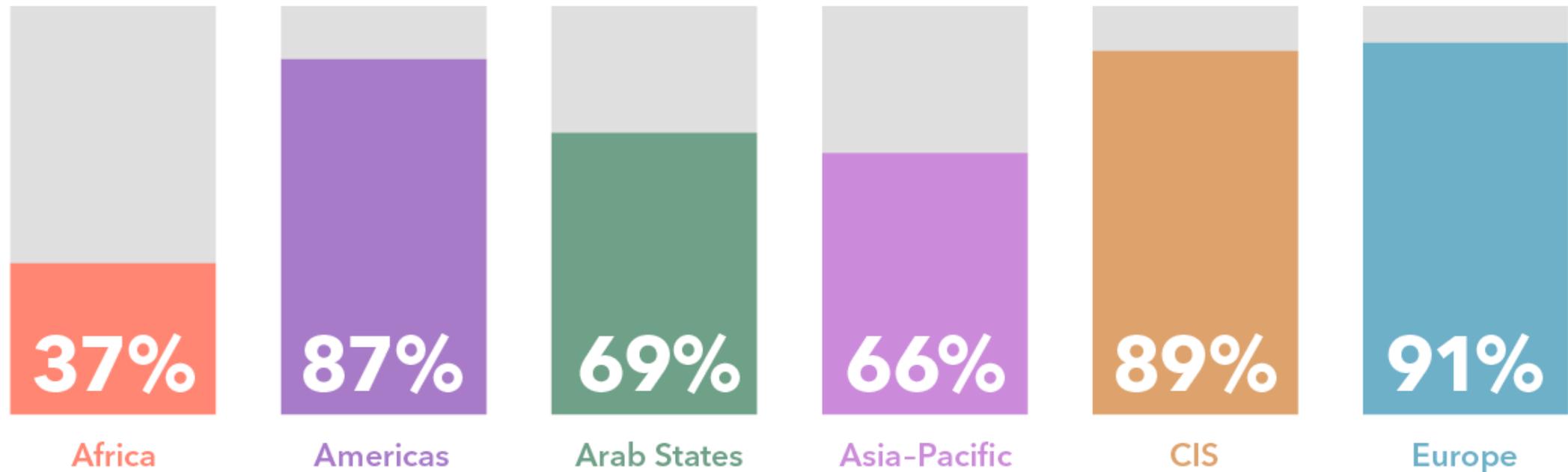
Decides on supply-side ICT indicators to be collected through the ITU statistical questionnaires on telecommunications/ICT

Working together on issues related to indicators and topics common to both groups

The digital divide (I)



Percentage of individuals using the Internet by region (2023)



Source : ITU, *Facts and Figures 2023*

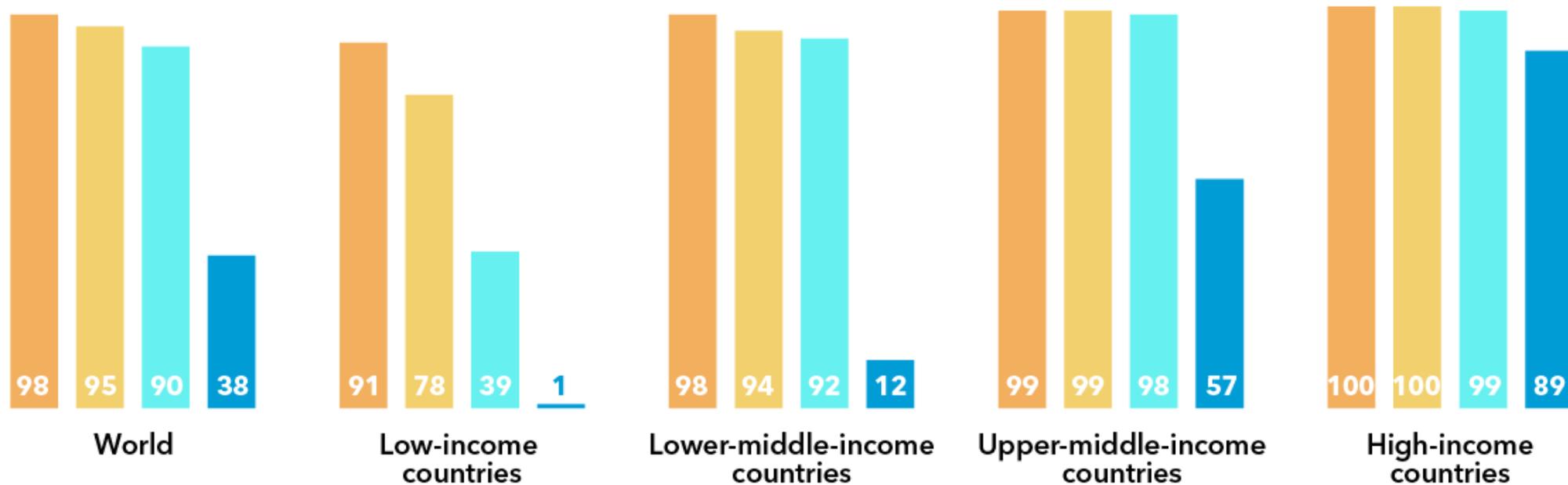
*ITU-D regions



The digital divide (II)



Percentage of population covered by type of mobile network by income group (2023)



Source: ITU, *Facts and Figures 2023*

*The composition of income groups refers to the World Bank classification.

2G 3G 4G 5G



Data collection on e-commerce



Essential for ICT policy makers and businesses

In production

Internet use by activity (**HH9**)

Purchasing or ordering goods or services (*SDG indicator)

Selling goods or services

Purchasers by type of goods and services purchased (**HH20**)

Purchasers by payment channel used (**HH21**)

Purchasers by method of delivery (**HH22**)

Non-purchasers by reason for not purchasing (**HH23**)

On-going work on data harmonization of enablers

Joint EGH/EGTI subgroup on measuring mobile money (2021)

7 indicators collected through household surveys proposed and approved by EGH - Overlap with more detailed World Bank Findex survey

4 indicators collected through administrative sources proposed and approved by EGTI - IMF collects similar data through Financial Access Survey

Pilot questionnaire on administrative data on mobile money (2023)

Administrative data on mobile money



Data collection challenges evident from pilot questionnaire

Definitions

Clarity of definition

Distinction between financial transactions over the mobile phone that depend on a bank account vs. those that do not require bank accounts

Distinction between peer-to-peer (P2P) vs peer-to-merchant (P2M) transactions: may be collected separately, or only 1 rather than both collected

Application of activity criteria: different mobile money agents within country may flag activity applying different time periods (i.e., not necessary 90 days)

Definition of agents

Double-counting P2P transfers

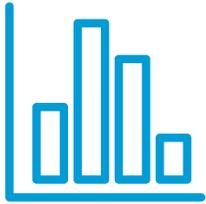
Practical

Source of statistics: need to involve other organizations (Central Banks)

Service not available in some countries -> lack of relevance (especially higher income countries)

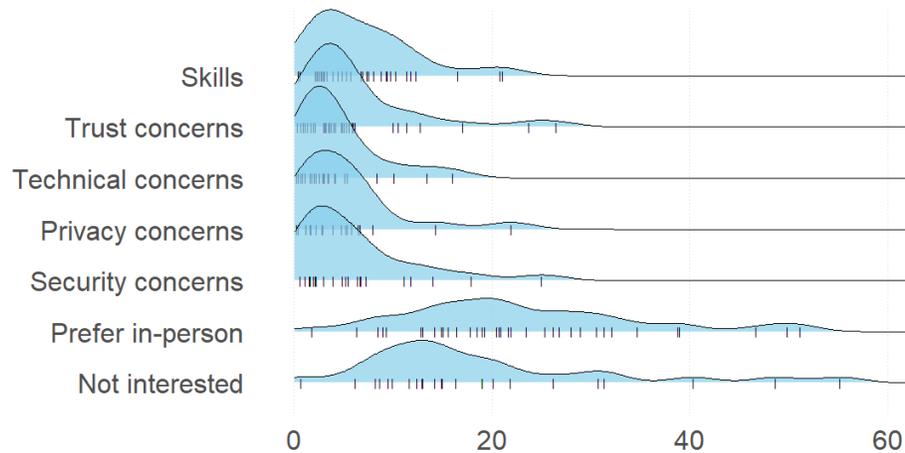
Regular data collection to be conducted by IMF given expertise - EGTI members to consult as needed

Potential for important insights from household surveys



Available data show important trends in **e-Commerce** and **reasons for not purchasing**

Share of individuals not purchasing online citing various reasons



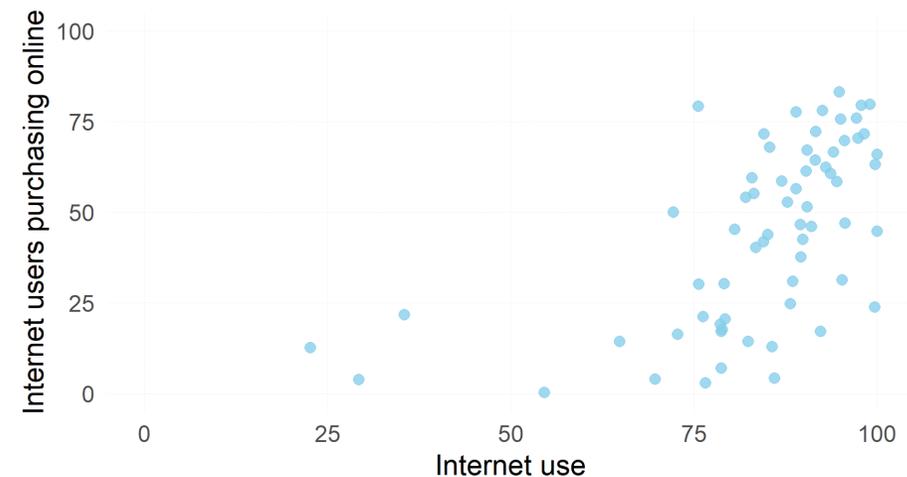
Preference for in-person or lack of interest cited often

Concerns with trust, technical considerations, privacy, security or lack of skills cited less often

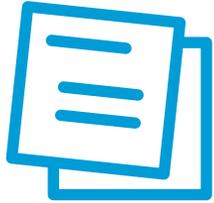
Higher Internet use -> higher likelihood of purchasing online

Wide range even among countries with high Internet use

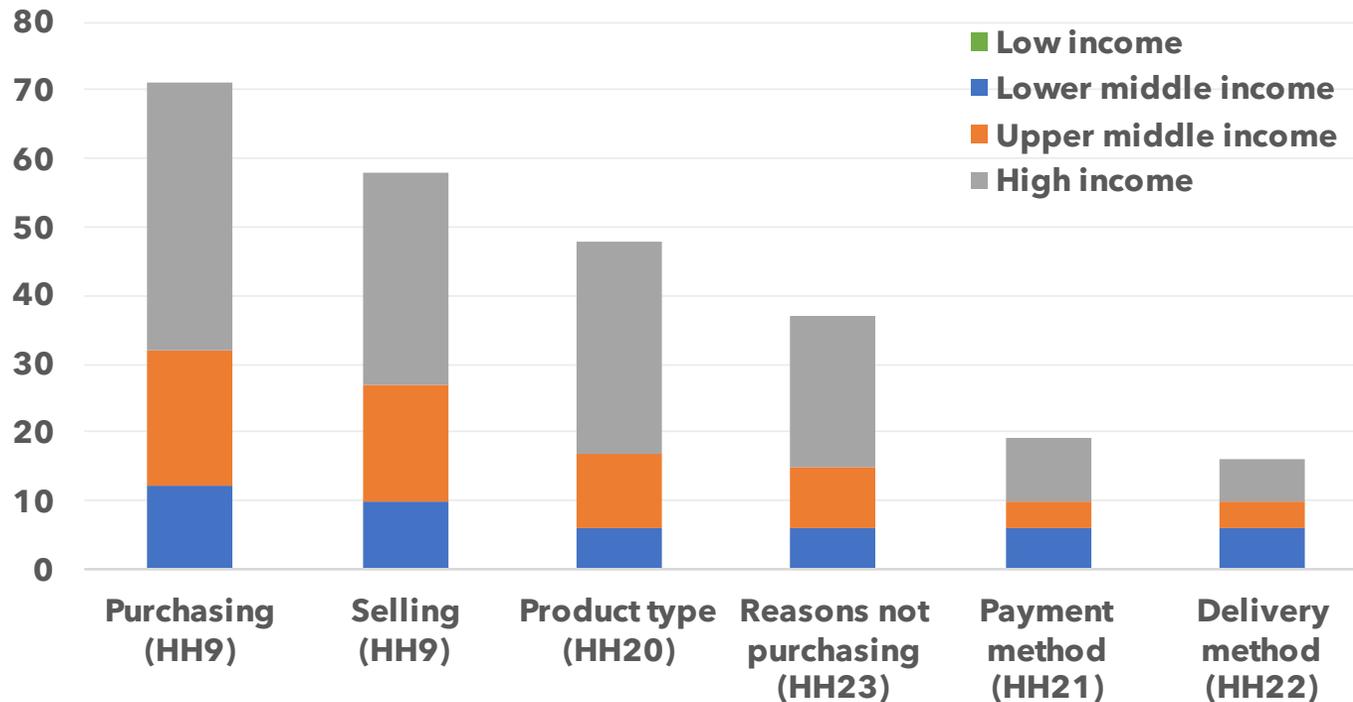
Share of Internet users making purchases online vs share of population using the Internet



But data availability remains poor



Distinct countries providing data on various e-commerce indicators since 2019



Data availability low for all indicators - very low for data on the breakdown of e-commerce

Data heavily biased to high income countries and European countries in particular

No recent data available for low-income countries

New indicators adopted in 2018

Four additional indicators (HH20 to HH23) on e-commerce

Integration into surveys often slow - EGH monitoring take-up

Resources

Expert groups (registration required)

- [EGH Forum](#)
- [EGTI Forum](#)

ITU methodological publications

- [Handbook for the Collection of Administrative Data on Telecommunications/ICT](#)
- [Manual for Measuring ICT Access and Use by Households and Individuals](#)
- [Methodological guide on the use of mobile phone data](#)

Data dissemination

- [ITU DataHub](#)
- [ITU Stats website](#)
- [Measuring digital development: Facts and Figures](#)

ITU Academy training courses

- [Measuring digital development: Telecommunications/ICT indicators](#)
- [Measuring digital development: ICT access and use by households and individuals](#)
- [Mobile Phone Data - Awareness Course](#)

Other ITU resources

- [ITU data collection schedule](#)
- [ITU Big Data project](#)

Statistical principles

- [Fundamental Principles of Official Statistics](#)
- [Principles Governing International Statistical Activities](#)

Thank you!

For more information:
www.itu.int/en/ITU-D/Statistics

