

### OECD WORK ON MEASURING E-COMMERCE AND THE DIGITAL ECONOMY

2022-2023 UPDATE

Nicolas BENOIT – Junior Economist in the OECD Directorate for Science, Technology, and Innovation nicolas.benoit@oecd.org

UNCTAD Working Group on Measuring E-commerce and the Digital Economy (WG-ECDE) – fourth meeting 30 November – 01 December 2023





#### Table of contents

- I. Review of the OECD Going Digital integrated Policy Framework and Measurement Roadmap.
- II. OECD's multistakeholder approach in developing statistical standards the e-commerce example.
- III. Recent digital economy measurement initiatives:
  - a. Survey-based: the *Truth Quest* survey,
  - b. Non-survey-based: cybersecurity and nowcasting ICT growth using machine learning.
- IV. Priority areas for future work highlighted at the last WPMADE meeting:
  - a. The definition and guidance on e-commerce,
  - b. Taxonomy or principles for measuring digital intensity across sectors.







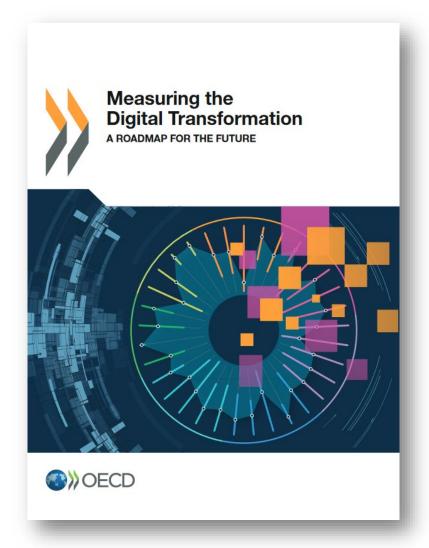
## The OECD Going Digital Integrated Policy Framework and Measurement Roadmap (1/2)

- The OECD Going Digital Integrated Policy Framework aims to help governments and stakeholders to develop an integrated approach to policy making in the digital age and to shape policies for an inclusive digital future.
- The Framework has seven interrelated policy dimensions (Access, Use, Innovation, Jobs, Society, Trust, Market Openness).
- Transversal policy issues (e.g., skills, digital government, SMEs, and data) cut across several policy dimensions.
- The Framework has been used for **national digital strategies**, OECD Going Digital reviews and more.
- The Framework has also been essential in developing the national digital strategy comprehensiveness indicator (NDSC), which serves both as a measure of the comprehensiveness of existing strategies and a guide to developing more comprehensive strategies in future.





# The OECD Going Digital Integrated Policy Framework and Measurement Roadmap (2/2)



- The OECD Going Digital Measurement Roadmap is an important tool to align OECD countries' priority areas for measuring digital transformation using common methodologies and approaches.
- It identified **nine actions** to advance the capacity of countries to monitor digital transformation and its impacts, with a tenth on gender, added subsequently.
- Since its inception, OECD Committees and its sister bodies have been working to implement the Roadmap, with significant outputs produced for each action.
- → Both the Going Digital Integrated Policy Framework and Measurement Roadmap will be revised in 2024/2025 to address fast evolving technologies like generative AI, quantum computing, etc.



## Exploring the OECD Going Digital Toolkit & Data Kitchen: key indicators on e-commerce and the digital economy



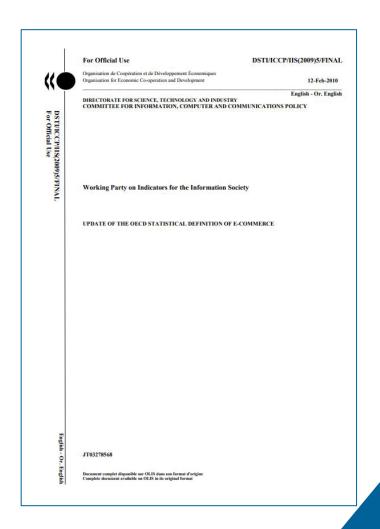
Get your own country page on the Going Digital Toolkit.

The Toolkit is now available in four languages: English, French, Arabic and Hebrew!



## OECD's multistakeholder approach in developing statistical standards: the example of e-commerce

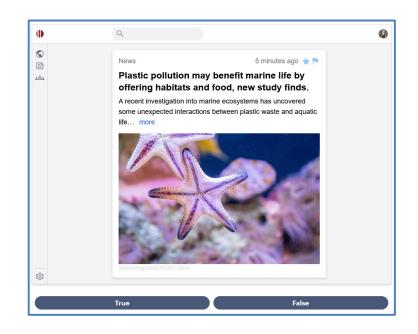
- The OECD employs a collaborative and multistakeholder approach to develop statistical standards.
- Example with the OECD definition of e-commerce (2009):
  - 1999: OECD establishes an Expert Group on Defining and Measuring E-commerce & Eurostat Task Force,
  - 2001: OECD definition of e-commerce,
  - 2009: Revised OECD definition of e-commerce.
- Comprehensive and widely accepted framework that goes beyond OECD countries.





### Recent measurement initiatives – Survey-based: the Trust Quest survey

- Most people are not good at discerning fact from fiction.
- Games are educational tools that can improve people's ability to identify false information,
- Web-based surveys have been used as an alternative to traditional forms of data collection.
- The *Trust Quest* survey is a **gamified survey** on the ability to tell fact from fiction. That covers diverse topics like health, environment, and AI.
- It includes a variety of false and true statements from fact-checking entities in a realistic environment.
- The survey covers 20 OECD countries + Brazil, on 5 continents → 40 000 respondents.
- Methodology and results presented in a dedicated paper at the 35<sup>th</sup> WPMADE meeting in **April 2024**.





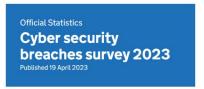


### Recent measurement initiatives – Non-survey-based: cybersecurity

- Measuring cybersecurity is crucial, but challenging:
  - It fits within the broader OECD digital measurement agenda (Going Digital Measurement Roadmap & review of the indicators in the OECD ICT Access and Use Databases),
  - Evidence-based policies rely on robust data, but cybersecurity is generally poorly measured,
  - Data from official and unofficial sources is often biased and not comparable across country,
- Two new innovative approaches for measuring uncertainty related to cyber-risks:
  - Based on news reports on cybersecurity,
  - Based on Google Trends topics on cyber incidents.
- Main objective: construct an index having potential applications in predicting relevant outcomes, like cybersecurity investments.
- Methodology and results presented in a dedicated paper at the 35<sup>th</sup> WPMADE meeting in April 2024.



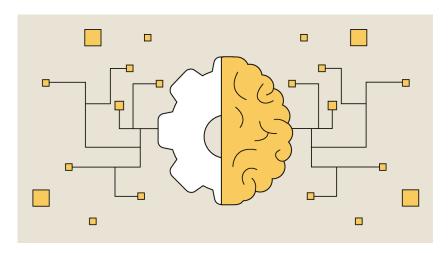








# Recent measurement initiatives – Non-survey-based: nowcasting ICT sector growth using machine learning





- Non-traditional data and machine learning techniques can serve as an important **complement** to **official statistics**.
- Real-time estimates can help shed light on how the ICT sector is performing today, which will help inform policy decisions that impact this vital sector of the economy in the future.
- Forthcoming DEO chapter will introduce a machine learning model designed to measure the economic growth of the ICT sector in OECD countries relying on two sources of data: ICT sector value added & Google Trends data.
- It will examine current economic growth trends of the ICT sector, compare them with economy-wide growth rates, and provide insights convergence/divergence trends among OECD countries.
- Methodology and results should be published in 2024 Q1.



### Priority areas for future work highlighted at the last WPMADE meeting

- Last WPMADE meeting held at the OECD in November 2023...
- ... highlighted two areas of priority for future work:
  - The definition and guidance on ecommerce, and,
  - The revision of the taxonomy and principles for measuring digital intensity across sectors.
- The OECD is pleased to involve UNCTAD members as appropriate in these discussions.







### THANK YOU!

Should you have any question, please feel free to reach out at:

nicolas.benoit@oecd.org

