What is “the digital economy”?

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E-commerce and the digital economy
What is “the digital economy”?

Hard to define
- Multi-faceted
- Cuts across institutional sectors and industries
- Affects production and consumption: what, how, and by whom
- Both tangible and abstract

Hard to agree on
- Different perspectives
- Linked to varying analytical and policy questions

Hard to measure
- Need for multiple sources and measurement approaches
- Digital systems contain a lot of information, but accessing and making sense of it can be challenging
One starting point: a definition of “economy”

[Adapted slightly] from Merriam-Webster dictionary

“the process or system by which goods and services are produced, sold, and bought in a country [and internationally]”

How “digital” must each of these be to count as part of “the digital economy”? 
Drawing definitive boundaries is challenging – tiered definition of the digital economy

- Developed for G20 Digital Economy Task Force (OECD, 2020)
- Emphasises the nature of:
  - **Products** - ICT goods and services, digital content, digitally delivered services
  - **Production** - extent of reliance on “digital inputs”
  - **Transactions** - digitally ordered / digitally delivered
What would you include in "the digital economy"?

**Products**

### Products purely digital in form?
- Streaming services
- CAD designs
- Software (ICT product)

### Products that can be digital or physical – when delivered digitally?
- (e-)books
- Training (e-learning)
- Banking services (online banking)

**Enabling (ICT) services?**
- Telecommunications
- Data processing, hosting
- Repair of ICT equipment
- Cloud services

**Enabling (ICT) goods?**
- Computers, smartphones?
- Servers, Network switches?

**Components?**
- Processors, storage, sensors?
- Glass?

**Connected versions of products?**
- “Smart” TV/light bulb/fridge?
- Airbus A350?

**Data?**

<table>
<thead>
<tr>
<th><strong>Production</strong></th>
<th><strong>Transactions</strong></th>
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<tbody>
<tr>
<td><strong>Producers of ICT products?</strong></td>
<td><strong>Transactions that are agreed “digitally”?</strong></td>
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<tr>
<td>- Computer makers</td>
<td>- Buying online</td>
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<td>- Software makers</td>
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<tr>
<td><strong>Producers of products “digital in form”?</strong></td>
<td><strong>Transactions where the payment takes place “digitally”?</strong></td>
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<td>- Cloud services providers</td>
<td>- Paying in a physical store by card, QR code, mobile money etc.</td>
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<td>- Designs for 3d printing?</td>
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<tr>
<td><strong>Producers reliant on digital technology?</strong></td>
<td><strong>Transactions where digital technology plays any role?</strong></td>
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<td>- Online platforms</td>
<td>- Car dealer advertises vehicle online but sale is in-person and paid by cash</td>
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<tr>
<td><strong>Producers whose production is significantly altered or enhanced by using digital technology?</strong></td>
<td><strong>We don’t have to agree a precise boundary for “the digital economy” to be able to measure important aspects!</strong></td>
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<td>- Publishing</td>
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<td>- Car makers</td>
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<td>- Airlines</td>
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<td>- Taxis</td>
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</table>
What would *you* include in "the digital economy"?

**Products**

- **Digitally delivered services**
  - Streaming services
  - CAD designs
  - Software (ICT product)

- **Products that can be digital or physical – when delivered digitally**
  - (e-)books
  - Training (e-learning)
  - Banking services (online banking)

- **Components**
  - Processors, storage, sensors?
  - Glass?

- **Internet of Things**
  - Smart TVs, smart watches?

- **Data**
  - Data as an asset

**Production**

- **Producers of ICT products?**
  - ICT sector

- **Producers of products “digital in form”?**
  - Cloud services providers
  - Designs for 3d printing?

- **Producers reliant on digital technology?**
  - Online platforms

- **Producers whose production is significantly altered or enhanced by using digital technology?**
  - Publishing
  - Car makers
  - Airlines
  - Taxis

- **Producers that make any use of digital technology?**
  - Hairdresser uses WeChat to schedule customer appointments

**Transactions**

- **Digital ordering (e-commerce)**

- **Digital payments**
  - (e.g. payment card stats, mobile money stats, crypto)

- **Transactions through Digital Intermediary Platforms**
  - Car dealer advertises vehicle online but sale is in-person and paid by cash

**Measurement frameworks and efforts cover all these aspects of “the digital economy” (and more)**
Moving forward together

Although there is no generally accepted definition of “the digital economy”, there is much international agreement over the definition and measurement of key elements and perspectives.

This Seminar will introduce both established and relatively new aspects of digital economy measurement including:

- Going digital toolkit framework and indicators
- Digital supply-use tables
- Measuring the ICT sector
- Measuring ICT use in business and households
- Measuring Digital trade
- Relevant changes in the forthcoming SNA+BOP

None of these claims to measure “the digital economy” as a whole, but they establish a foundation for tackling questions related to “the digital economy” and a shared direction of travel.