The value and role of data in e-commerce and the digital economy and its implications for inclusive trade and development

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OVERVIEW

- The increasing role of data
- Digital divides
- The value of data: monetization and developmental benefits
- Challenges in a data-driven economy
- Policy and regulatory implications: data protection, regulating cross-border data flows, competition policy, taxation
- The need for capacity building for data analytics and AI
- Guiding questions
THE DATA-DRIVEN ECONOMY: OPPORTUNITIES AND RISKS FOR DEVELOPING COUNTRIES

Opportunities

- New sources of knowledge, innovation and profits if data are analyzed effectively and transformed into intelligence
- Data analytics can be used to support SDGs

Risks

- Privacy
- Security
- Data ownership
- Use of data
- Concentration of market power of companies that control the data
AN INCREASINGLY DATA-DRIVEN ECONOMY

Surging global data flows

1992 | 2002 | 2017
100 GB/day | 100 GB/sec | 45,000 GB/sec

Access to data is becoming crucial for competitiveness and the expansion of companies across sectors
BUT AT DIFFERENT SPEEDS AND THERE ARE GAPS ...

Global connectivity gap
49% remains offline

In LDCs
Only 1 in 5 is connected

Gender gap
In 2017 proportion of women using the Internet worldwide 12% lower

The gap is more pronounced in developing countries

MSMEs are less prepared to take advantage of the digital economy

Sources: UNCTAD, ITU
GEOGRAPHICAL DISTRIBUTION OF DATA CENTERS

Number of Co-location Data Centres per Country
UNCTAD B2C E-COMMERCE INDEX 2018

Regional Average Values

<table>
<thead>
<tr>
<th>Region</th>
<th>Index Value</th>
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</thead>
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<tr>
<td>Africa</td>
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<tr>
<td>East, South &amp; Southeast Asia</td>
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<tr>
<td>World</td>
<td>55</td>
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THE VALUE OF DATA: MONETIZATION & DEVELOPMENT BENEFITS

- Data becoming essential in decision-making, production, transaction and relationship management
- The value of data arises once transformed into “digital intelligence”
- Data can be monetised in different ways
  - Advertising revenue (Google, Facebook)
  - Marketplace transactions (Amazon, eBay, Alibaba, Uber, etc.)
  - Optimization of production (Caterpillar, Rolls Royce)
  - Selling/renting out cloud services (AWS)
- Users value the ("free") services; pay by providing detailed data
- Data collection and analysis can help to manage or resolve critical global issues, such as disease outbreaks or traffic conditions
CHALLENGES AND OPPORTUNITIES IN A DATA-DRIVEN ECONOMY

Key policy issues (e.g.)
- Data privacy and security
- Competition policy and market concentration of digital platforms
- Regulating cross-border data flows
- Taxation

Implications for most developing countries
- Far behind in Internet use/e-commerce use
- Less prepared:
  - Lack of data protection and consumer protection laws
  - Lack of affordable ICT and cloud infrastructure
  - Lack of skills (e.g. data scientists)
- Weak position in the data value chain
DATA PROTECTION

The current regulatory environment for data protection is highly fragmented
- Outdated or incompatible legal frameworks
- New pieces of legislation introduced may be incompatible
- Enforcement of privacy and security obligations is often inadequate
- Many developing countries still lack data protection and privacy legislation altogether
- The lack of clarity creates uncertainty for consumers and businesses, and limits the scope for cross-border exchange and growth.

Coherent and internationally compatible national data protection regimes to facilitate cross-border trade will be ever-more important
- There is greater consensus on core data protection principles, but great variability in national data protection laws
- UNCTAD proposed eight principles that could serve as a starting point for interoperability and harmonization efforts
RECENT DEVELOPMENTS ON DATA PROTECTION

The EU General Data Protection Regulation (GDPR)
- Significant implications for doing business in an increasingly data-driven economy.
- Applies to data on European citizens regardless of where data are stored.
- It has global reach in effect.

A number of countries are adopting similar approaches to the GDPR, including Brazil, India, Japan, the Republic of Korea and Thailand.

Companies, physically located in the EU or not, have to upgrade their privacy and data protection schemes.
REGULATING CROSS-BORDER DATA FLOWS

- The digital economy relies increasingly on **cross-border data flows**
- National regimes on such flows **impact international trade**
- **...but growing number of concerns of Governments** over national security, privacy, movement and ownership of data
- **Barriers** at times coupled with **data localization policies**
- Excessively stringent limitations on data flows can have **negative effects by limiting production, trade and innovation**
- The policy and regulatory challenge is to **find a balance** between support for process that allow transfer of data, on the one hand, and addressing concerns related to privacy, security and economic development, on the other.
- As international trade becomes increasingly digital, countries need to consider how best to address the **interface between trade policies and Internet governance**
DIGITAL PLATFORMS AND COMPETITION

- Some global platforms have become monopolies: risk for anticompetitive practices and abuse of dominant position
- Network effects: the more users, the more valuable the platform becomes
- Ability to extract, control and analyze data as intermediaries
- Lock-in effects – once dominant, hard to switch
- Mergers and acquisitions
- Reinforcing positions through R&D and investment
- Need for considering adaptations to competition policy
  - Analysis based entirely on prices may not be adequate
  - Need to consider issues such as harm to consumer privacy, impacts on broader ecosystem, market structure and innovation
- Need for international cooperation
DIGITAL PLATFORMS AND TAXATION

- Digitalization may weaken the international tax concept that places jurisdictional tax claims over profits of multinational corporations based on digital presence.
- The digital economy may enable global digital platform companies to engage in tax optimization practices.
- Ongoing review of key concepts of international tax system in the OECD/G20 context.
- Need for increased international policy cooperation involving developing countries.
THE NEED FOR CAPACITY BUILDING FOR DATA ANALYTICS AND AI

- Data are only of value if there is capability to transform them into intelligence
  - In some countries and enterprises such capability is limited
  - Development strategies need to include the objective of digital upgrading to enhance domestic capacity of value addition along the data value chain
  - Digital specialists, data analytics skills, as well as ICT skills and foundational skills upgrading needed
NEW SKILLS NEEDED IN THE DIGITAL ECONOMY

New skills & education adjustments required

- Strong non-cognitive, adaptive and creative skills

Strategic jobs needed

- Data scientists & analysts

Challenges:

- Changes in labour regulations may be needed to facilitate new jobs and skills transitions

Sources: Melguizo and Perea, European Commission, van Welsum and Lanvin
THE NEED FOR CAPACITY BUILDING FOR DATA ANALYTICS AND AI

- **Capacity-building efforts** are needed to reduce the digital and data divides between and within countries.
- **The role of ODA** in terms of international policy on capacity-building needs rethinking:
  - strategic programmes should include the development of digital capacities.
- **Current levels of ODA** devoted to ICT are inadequate.
UNCTAD CAN SUPPORT CAPACITY BUILDING IN THE DATA-DRIVEN ECONOMY

- eTrade for all
- Rapid eTrade Readiness Assessments
- eCommerce strategies
- eCommerce and Law Reform
Guiding questions

1. What are the role and value of data in e-commerce and the digital economy in the context of inclusive trade and development?
Guiding questions

2 What are the key opportunities and challenges associated with managing and regulating data and data flows?
Guiding questions

3 I What are the public policies, regulations and institutional arrangements in different countries and regions for harnessing and protecting data related to e-commerce and the digital economy, and bridging the digital divides including between and within countries and relating to youth, rural economy, microenterprises and small and medium-sized enterprises and gender?
Guiding questions

4 I How could developing countries build capacities, including skills, to use new and emerging technologies such as big data analytics and artificial intelligence?
eCommerce and the Digital Economy

Third session

THANK YOU!