

# eCommerce and the Digital Economy

## Third session

Intergovernmental Group of Experts on  
E-commerce and the Digital Economy



## 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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3-5 April 2019

# 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

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

## Reduced cost of hard drive storage



Access to data is becoming crucial for competitiveness and the expansion of companies across sectors



**Robotics**



**Artificial intelligence**



**Internet of Things (IoT)**



**Cloud computing**



**Big data analytics**



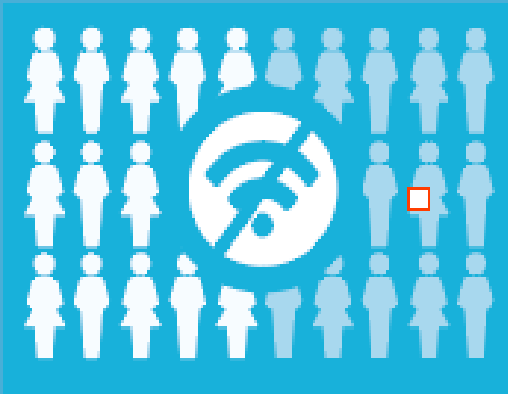
**3D printing**

# 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

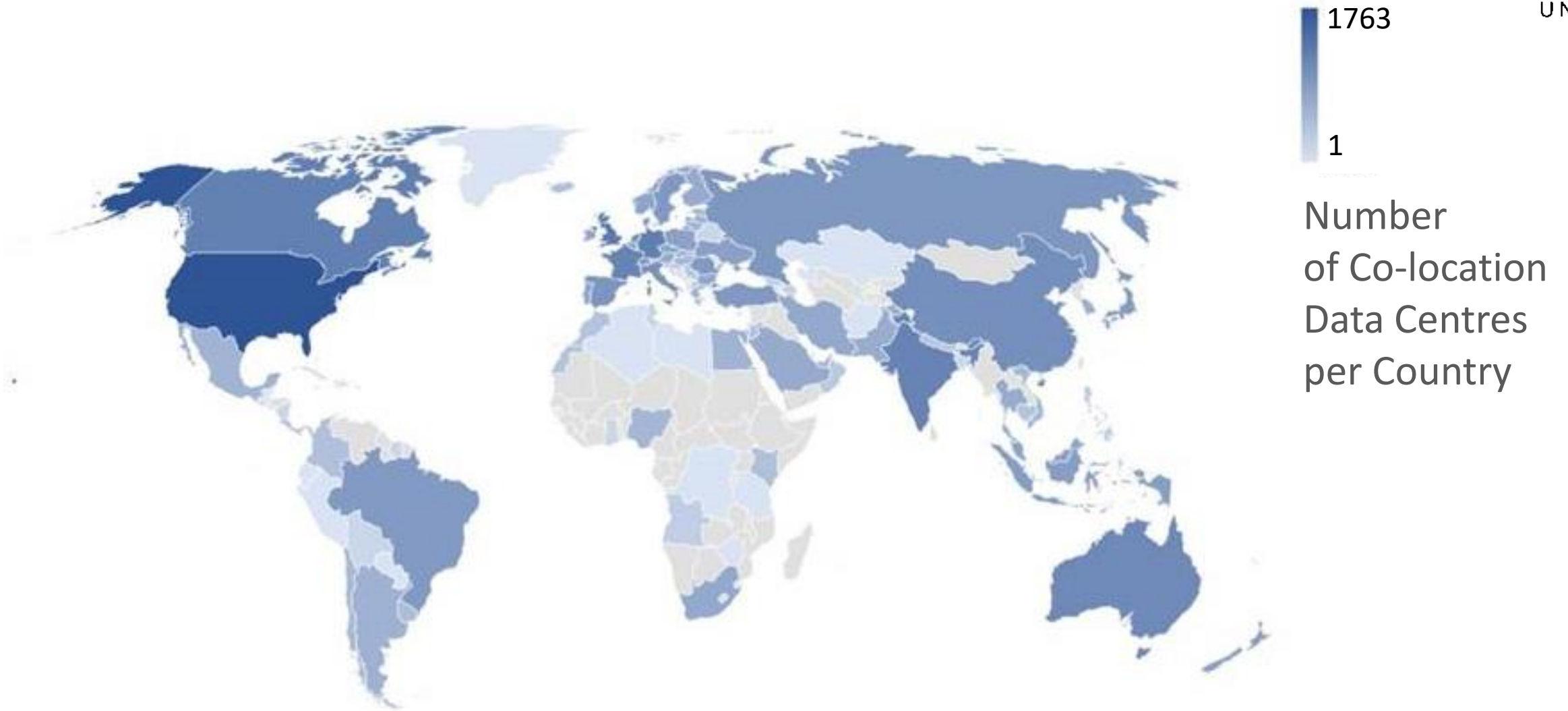
to take advantage  
of the digital economy



# GEOGRAPHICAL DISTRIBUTION OF DATA CENTERS

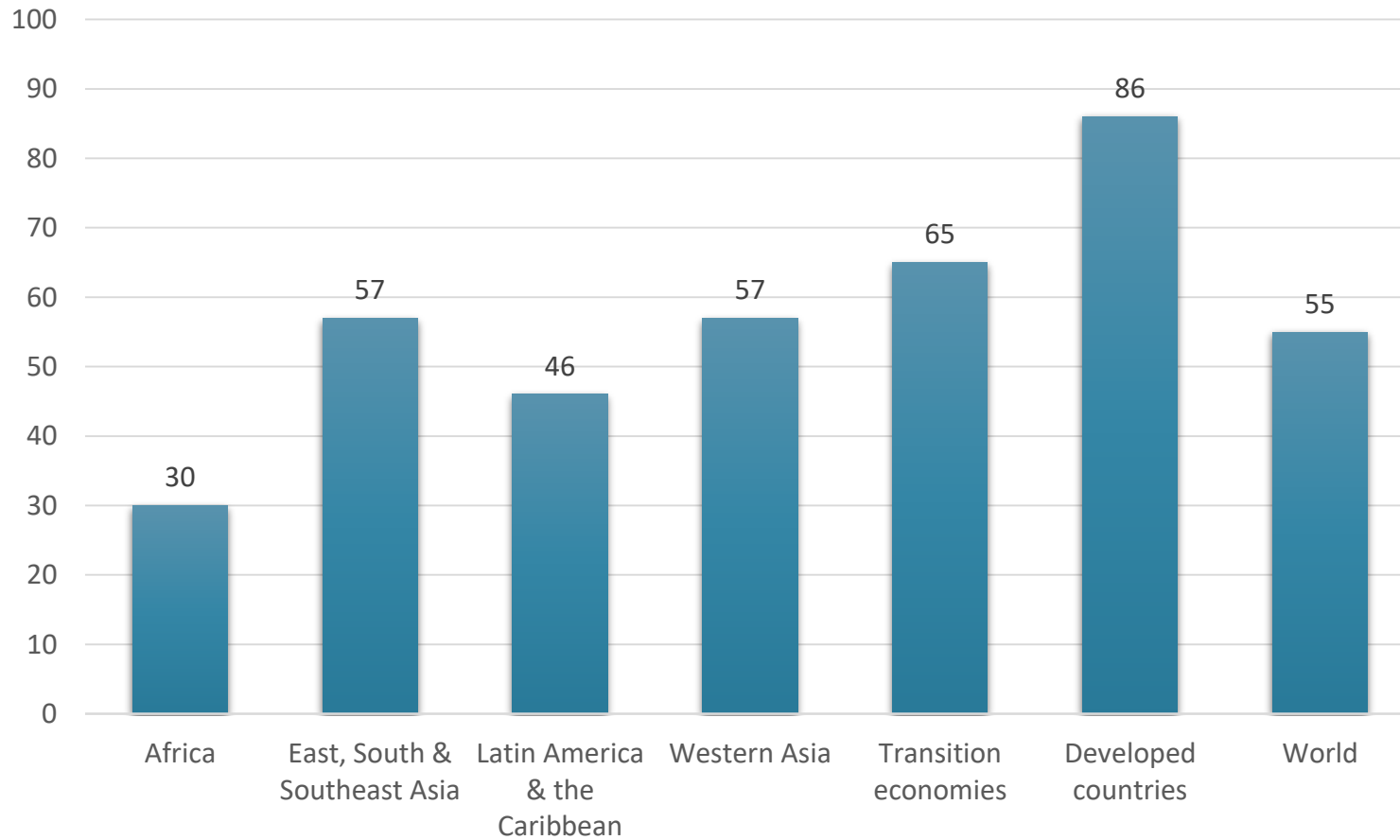


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# UNCTAD B2C E-COMMERCE INDEX 2018

## *Regional Average Values*



# 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





## Key policy issues (e.g.)

- Data privacy and security
- Competition policy and market concentration of digital platforms
- Regulating cross-border data flows
- Taxation

# CHALLENGES AND OPPORTUNITIES IN A DATA-DRIVEN ECONOMY

## 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

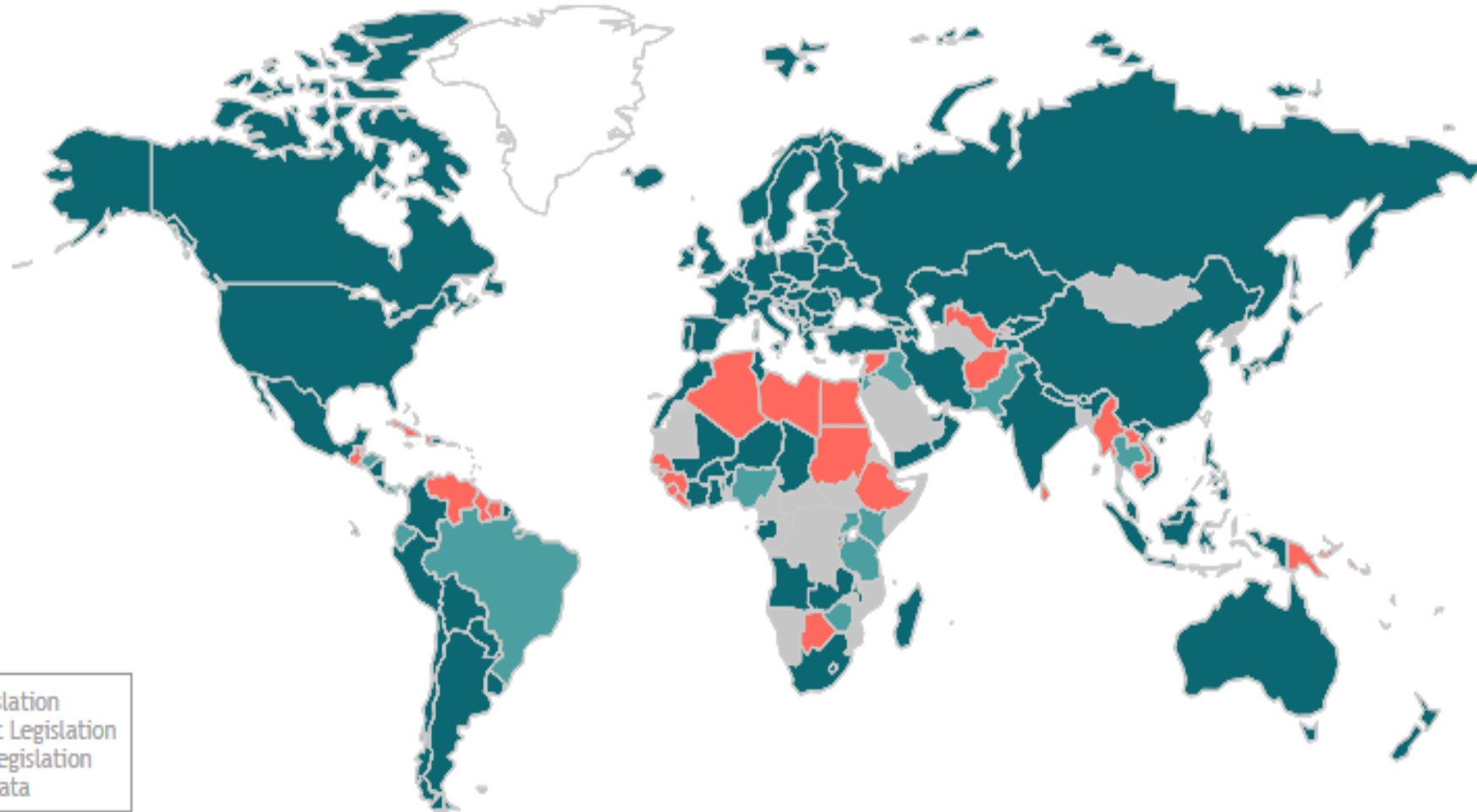
# DATA PROTECTION

- **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

# UNCTAD.ORG/CYBERLAWTRACKER



## Data Protection and Privacy Legislation Worldwide



Source: UNCTAD, 01/04/2018

# 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

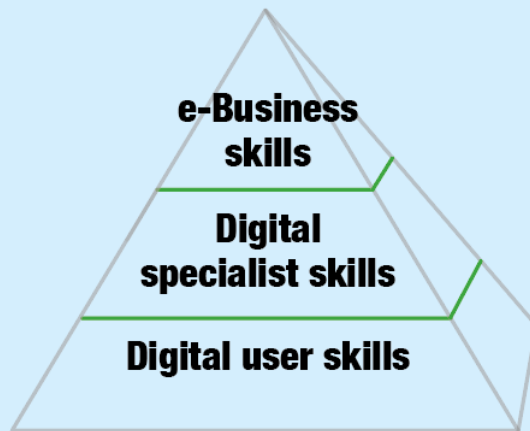
# THE NEED FOR CAPACITY BUILDING FOR DATA ANALYTICS AND AI

- **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**

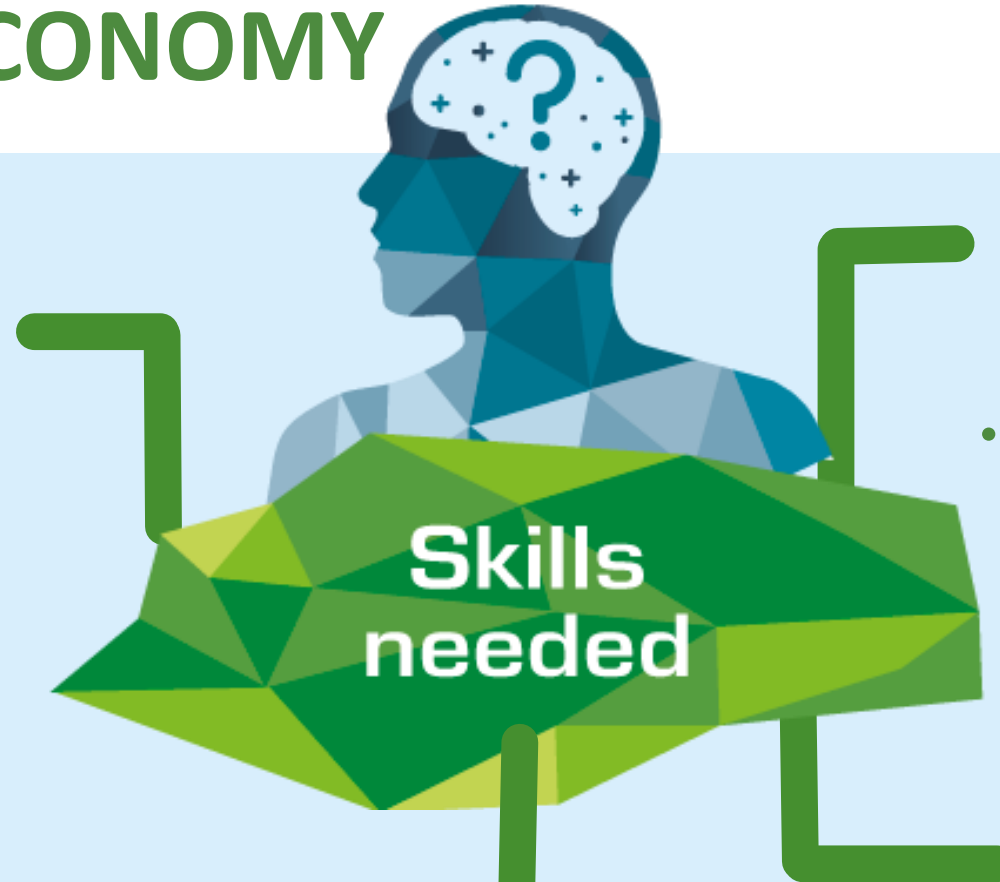
New skills & education adjustments required



- Strong non-cognitive, adaptive and creative skills

Strategic jobs needed

- Data scientists & analysts



Challenges:

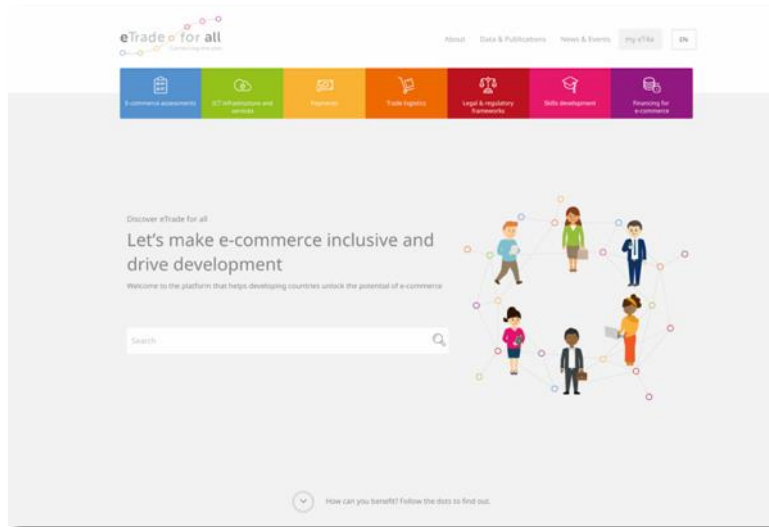
- Changes in labour regulations may be needed to facilitate new jobs and skills transitions

# THE NEED FOR CAPACITY BUILDING FOR DATA ANALYTICS AND AI

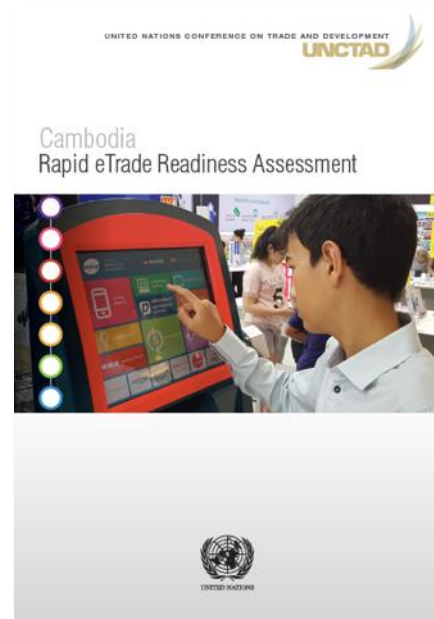
- **Capacity-building efforts** are needed to reduce the digital and data divides between and within countries
- **The role of ODA** in terms of international policy on capacity-building needs rethinking
  - strategic programmes should include the development of digital capacities
- **Current levels 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

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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

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2 | What are the **key opportunities and challenges** associated with managing and regulating data and data flows?

## Guiding questions

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3 | 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?

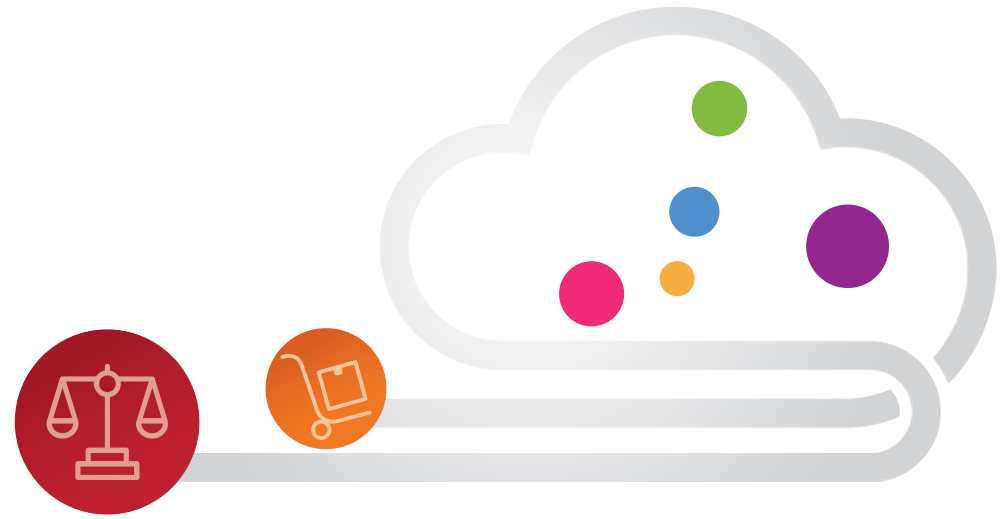
# Guiding questions

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4 | How could developing countries build capacities, including skills, to use **new and emerging technologies** such as **big data analytics** and **artificial intelligence**?

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**THANK YOU!**