

# Economic diversification in the digital era

- I. Opportunities and challenges of digitalization
- II. Rethinking the role of industrial and innovation policies
- III. 3 Key components for seizing opportunities
- IV. Global collaboration for inclusive diversification





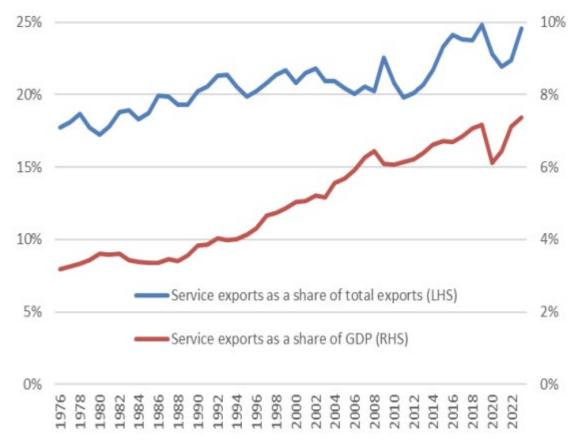




## Opportunities and challenges of digitalization



#### Increasing importance of service exports (Percentage)



Source: UNCTAD calculations, based on data from the World Bank.

The shift towards technologyled transformation is challenging traditional export-focused models





## Opportunities and challenges of digitalization



## **Industry 4.0** frontier technologies



Artificial intelligence



Internet of things



Big data



Blockchain



5G



3D printing



Robotics



Drone technology

Industry 4.0 technologies have revolutionized industries by increasing data generation, connectivity, and productivity

Digital technologies, offer opportunities to diversify economies in developing countries, but they also may pose challenges to traditional advantages of developing countries





## Opportunities and challenges of digitalization



#### **OPPORTUNITIES**



#### **Enhanced productivity**

Increase competitiveness of firms and products



#### **Fostering new industries**

Create new markets around data-driven services and digital platforms



### **Promoting digital &** green transition

Develop new green industries and revitalize traditional ones

#### **CHALLENGES**

#### **Induced reshoring**

Undermine developing countries participation in GVCs



#### Reduced demand for low-skill jobs

Shift the competitive focus from cheap labor to automation and skills



#### Widened productivity gap

Deepen digital divide due to high barriers to access new technologies



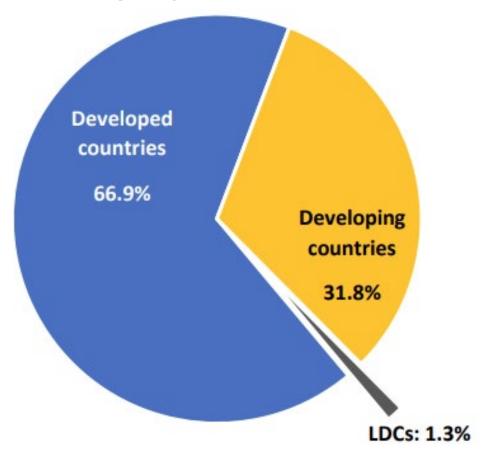




## Rethinking the role of industrial and innovation policies



#### **Share of policy interventions, 2010-2021**



Industrial policies are growing in popularity, with developed countries leading the way

Developing nations face challenges in identifying the right opportunities and solutions

Source: UNCTAD elaboration on Global Trade Allert (GTA) data

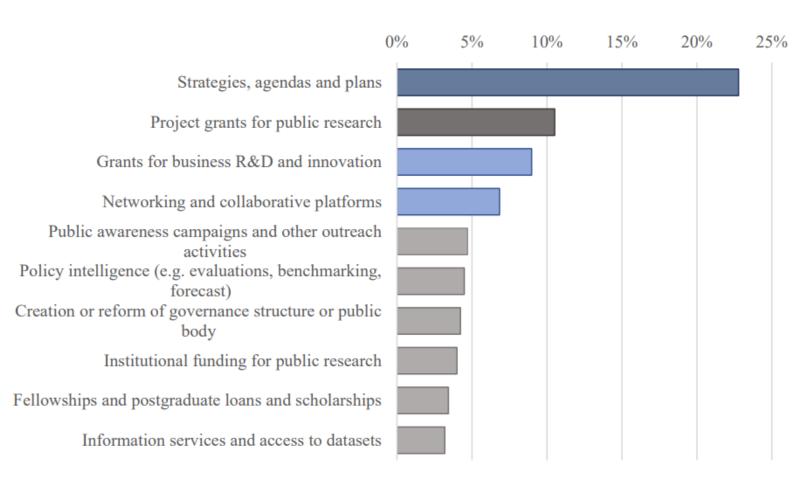




## Rethinking the role of industrial and innovation policies



#### Most frequently used instruments in STI policies (2010-22)



- The shift to a knowledge-based economy has made **STI policies key to economic growth**
- Growing investment in R&D, with grants for research and support for small businesses
- > Need for updated industrial policies to keep up with digital technologies like AI

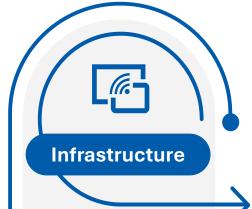
Source: UNCTAD elaboration on STIP-OECD data





## 3 Key components for seizing opportunities



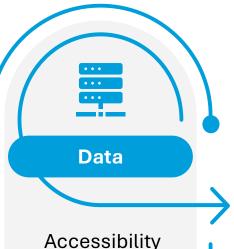


#### Digital connectivity

- Electricity, digital devices
- International and lastmile connectivity

#### Computing power

- Data centres, cloud computing
- High-performance computing



- Large, diverse data sets
- Affordable access. open access

#### Quality

Standardized, representative, interoperable data



#### Public adoption

- Basic digital literacy
- Understanding and integration of digital tools

#### Technical workforce

- Advanced digital skills
- Frontier technology expertise

- 1. Strong digital public infrastructure is essential for adopting digital technologies
- 2. Open innovation models can improve data access by promoting cross-border collaboration
- 3. International cooperation on capacity-building can support reskilling and upskilling to meet the demands of the digital economy

#### **Transversal Challenges**

- Funding
- SME support
- Governance and regulation
- Technology

## Global collaboration for inclusive diversification



- Al and data governance initiatives remain fragmented and need better coordination
- Urgent need to
- **Strengthen global cooperation**
- **Support capacity-building**
- **Establish inclusive frameworks**





# Thank you

