### MULTI-YEAR EXPERT MEETING ON

# Trade, Services and Development

9th session

4-6 July 2022, Hybrid (online and Palais des Nations, Room XVII), 2.30-4.30 p.m. CEST

Session 2. The potential for diversification towards and through digitally deliverable services

Building capacity in digital services trade

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\*The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.





# **Building Capacity in Digital Services Trade**

Multi-year Expert Meeting on Trade, Services and Development
Ninth session
Geneva, 4–6 July 2022

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UNESCAP



## **Outline**

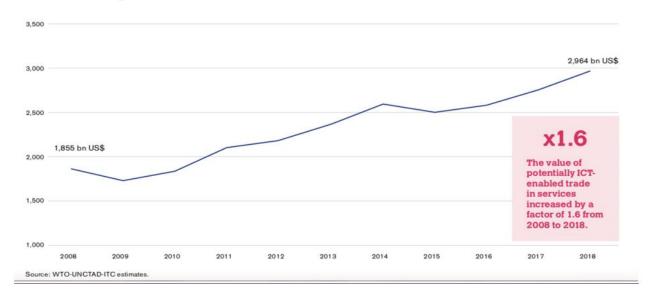
- Significance of digital services trade
- Potential for diversification
- Key drivers of capacity
- Regulatory restrictions: An area of growing concern
- Looking ahead

# Significance of Digital Services Trade

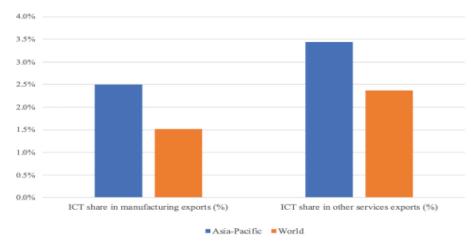


- Spread of digital technologies and increased fragmentation possibilities transforming all types of global flows- goods, services, and finance resulting in digital trade
- Digital services an important component of digital trade- estimated 50% of traded services are digitally enabled compared to 15% of traded goods (McKinsey)
  - More than doubled between 2005-14, with increased share of developing countries and LDCs
  - Growing range of tradeable services, fastest growing area of trade in recent years
  - Significant increase in cross-border data flows
- UNCTAD valued digitally delivered services exports at US\$ 2.9 trillion in 2018 or 50% of global services exports, of which 16% from LDCs and up from \$1.9 trillion in 2008
- But difficult to value due to differing breadth of definitions and overlaps with segments like e-commerce, ICT-enabled services
- Benefits to firms, consumers, wider economy in the form of reduced transaction costs and information asymmetries, employment, incomes, foreign exchange earnings, skilling, new business models, innovations

#### Growth of potentially ICT-enabled services in world trade, 2008-18 (US \$bn)



#### Global and regional use of digital services as inputs in exports, 2015



Source: ESCAP calculation, based on OECD TiVA data (accessed October 2020)



#### **Potential for Diversification**



- Digital services trade offers countries huge scope for economic diversification:
  - Wide range of countries can participate
  - Many types and stages of digital services exports
  - Many different destination markets
  - Different sources of competitive advantage
- Countries are at different stages of development in their digital services exports: nascent, emerging, established
- Destination markets diverse
- Countries can leverage different kinds of strengths-cost, talent, domain competencies, scale of domestic market, language, geography and time zone, competitiveness in other sectors, FDI, presence of digital enterprises, innovation environment, servicification opportunities

- Types of digital services trade- span many verticals and types of service activities
  - traditional call centre type services based on cost and locational advantages
  - advanced AI and cloud-based services based on skills and domain competencies
  - services linked to goods trade and manufacturing competitiveness, embedded services
  - services supporting e-commerce such as fintech
  - Across domains- business and professional, health, animation, education, logistics, financial
- Professional service products
  - legal briefs, consulting reports, or architectural and engineering designs, can easily be digitized and transmitted over the Internet, growing share of international trade with benefits of increased productivity, lower costs, broader scope, faster delivery
- Range of healthcare applications
  - telemedicine, electronic health records management, diagnostic services, health information portals, records storage, data processing and sharing, e-referrals and e-prescriptions, and medical transcription with benefits of more efficient management of information, more effective communication between all parties involved
- Education online courses & other educational resources made available on the Internet enabling innovations in the education sector, increased access and variety
- Small value digital services also part of this trade- online streaming music, e-books and online games
- Growing bundling with goods, blurring lines between goods and services, and previously non-tradable services



## **Building Capacity in Digital Services Trade**



- Both inherent and acquired competencies drive digital services trade, so an ecosystem approach is needed to develop capacity for digital services exports
- Four key interdependent pillars:
  - Digital infrastructure and readiness (telecom, internet penetration, and adoption)
  - Human capital (skills and talent)
  - Innovation ecosystem (R&D, startup culture)
  - Regulatory and business environment (trade, investment, data flows, e-commerce, other)

### • For example:

- Digital literacy and adoption are important to enable digital transformation in key sectors such as education, banking & finance, as growth of online financial and B2B transactions is an important facilitator of digital services trade
- Investments (FDI and VC funding in unicorns and digital enterprises), acquisitions overseas can enable digital services exports with bundling of modes 1 and 3

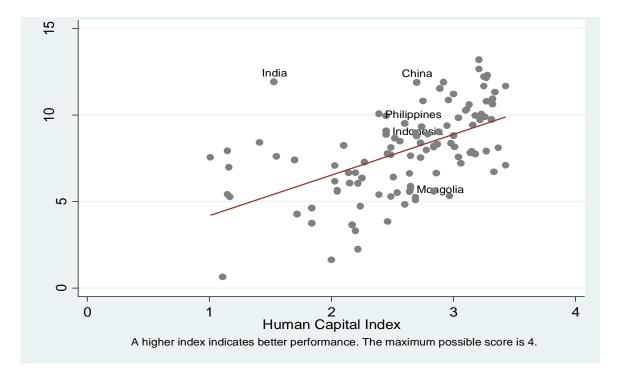


- Governments are following largely similar objectives in their roadmaps and strategies
  - developing the digital economy through investments in infrastructure
  - related skilling initiatives
  - support for startups and e-commerce
  - improving the business and regulatory environment

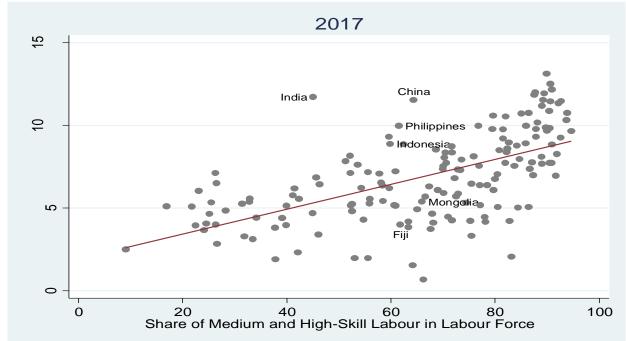
- Imports of digital services and goods also important for enabling capacity and competitiveness both in the domestic market and for exports
- Countries are at different stages in terms of regulatory capacity and preparedness, infrastructure development
- Issue of balancing commercial interests and public policy considerations such as consumer protection, interests of MSMEs, regulation of digital platforms



#### Human capital and Growth in Digital Services Exports, 2017



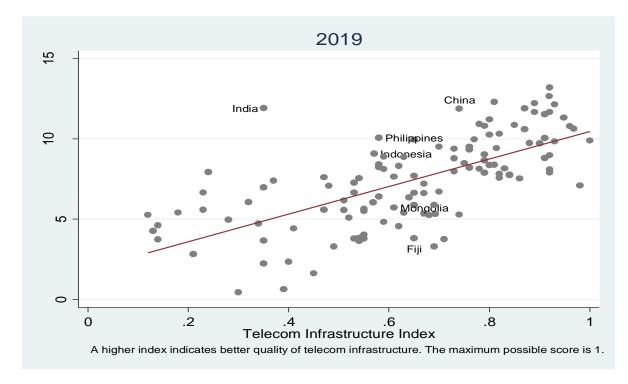
Share of Medium and High Skilled in the Labour Force and Growth in Digital Services Exports, 2017



Source: <u>CISCO Digital Readiness Index</u>
<a href="https://www.cisco.com/c/m/en\_us/about/corporate-social-responsibility/research-resources/digital-readiness-index.html#/">https://www.cisco.com/c/m/en\_us/about/corporate-social-responsibility/research-resources/digital-readiness-index.html#/</a>
(accessed July 7, 2021)

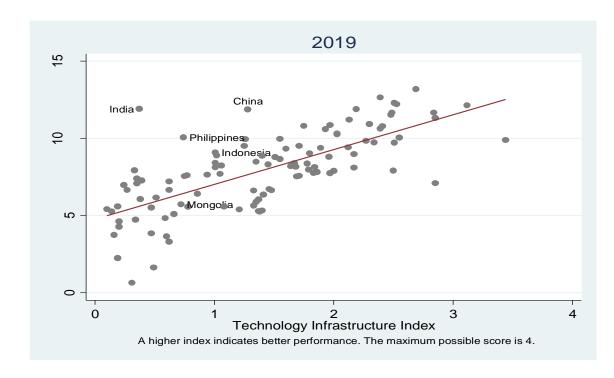


# Telecom Infrastructure and Growth in Digital Services Exports, 2019



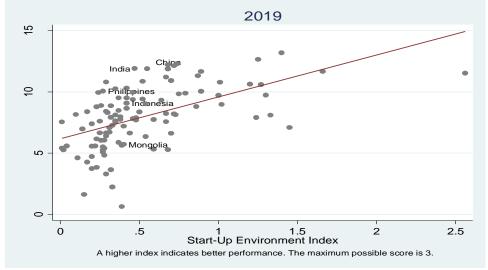
Source: <a href="https://publicadministration.un.org/egovkb/en-us/Data/Compare-Countries">https://publicadministration.un.org/egovkb/en-us/Data/Compare-Countries</a>

# Technology Infrastructure and Growth in Digital Services Exports, 2019



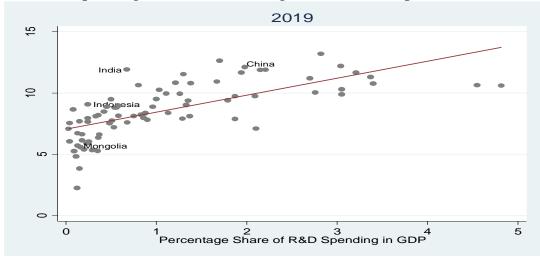
Source: CISCO Digital Readiness Index

Startup Environment and Growth in Digital Services Exports, 2019



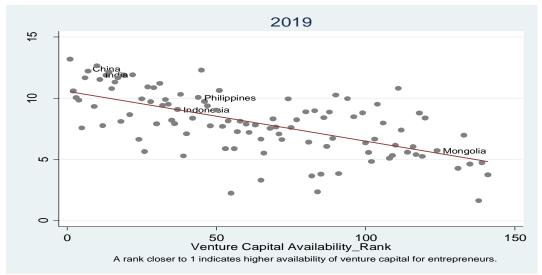
Source: CISCO Digital Readiness Index

R&D Spending and Growth in Digital Services Exports, 2019



Source: World Bank

Venture Capital Availability and Growth in Digital Services Exports, 2019

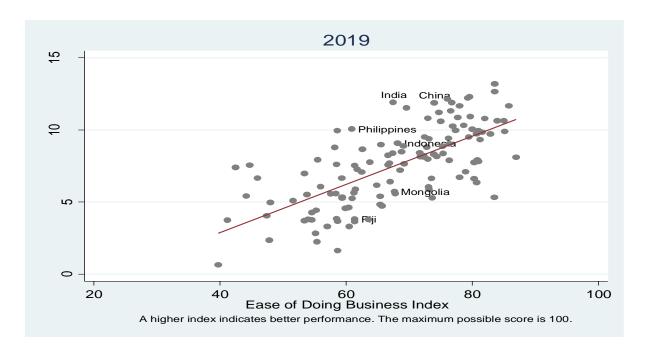


Source: World Governance Indicators

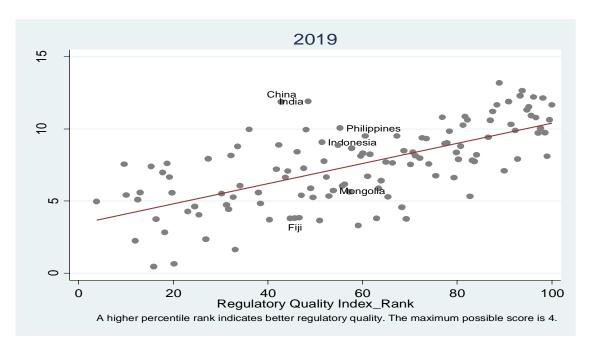




#### Ease of Doing Business and Growth of Digital Services Exports



#### Regulatory Quality and Growth of Digital Services Exports



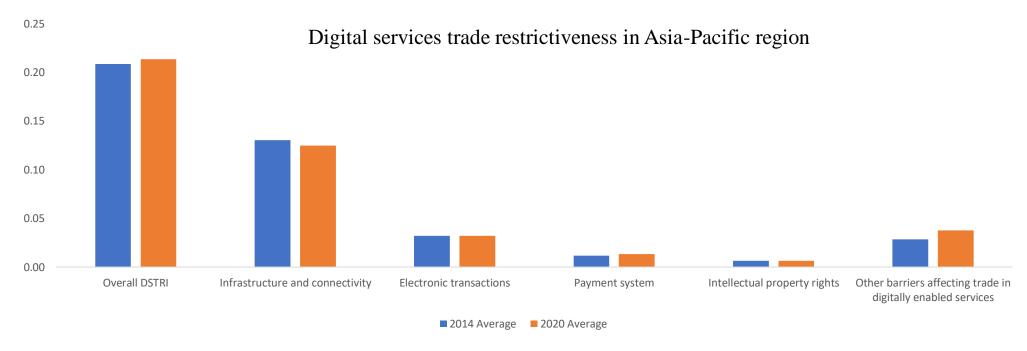
Source: World Bank

- Regulatory preparedness for digitalization of trade has implications for trade in digital services
- UNRC Global Survey on Digital and Sustainable Trade Facilitation reveals that:
  - Trade facilitation measures for cross-border paperless have been least implemented
  - Even when implemented, in limited scale or scope (such as ASEAN single window)
- Readiness assessments for 14 countries in Asia-Pacific region indicate
  - Few or no rules on aspects such as electronic transactions, electronic contracts and documents, electronic signature, data privacy and protection
- Relevance of frameworks such as The Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific to enable such regulatory preparedness
- Can accelerate cross-border paperless trade including actions for strengthening legal foundations which can also support trade in digitally deliverable services



## Regulatory Restrictions: An Area of Growing Concern

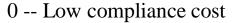
- Transparency in regulations, ease of data transfers, an open trade and investment regime, and supporting incentives are an important part of the regulatory environment for developing capacity in digital services trade
- But increasingly countries are imposing restrictions as indicated by the OECD's DSTRI and ESCAP's Regional Digital Trade Integration Index (RDTII)
- Growing regulatory divergence among countries could thwart digital services trade



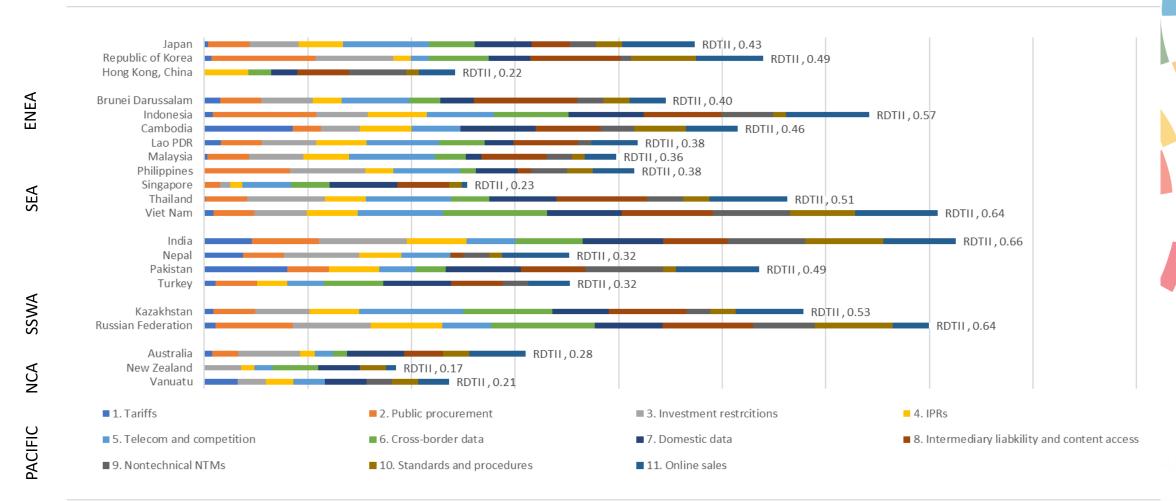
Source: OECD DSTRI



#### Asia-Pacific Regional Digital Trade Integration Index (RDTII) 1.0



#### High compliance cost -- 1





## Compliance challenges come more from behind-the-border

8. Intermediary liabkility and content access, 0.55	11. Online sales, 0.50	3. Foreign investment restrcitions, 0.47	6. Cross-border data, 0.42	9. Non-technical NTMs, 0.33
5. Telecom and competition, 0.52	7. Domestic data, 0.50	2. Public procurement, 0.42	4. IPRs, 0.38	10. Standards and procedures, 0.29  1. Tariffs, 0.18

Digital governance policies, 0.50

Other domestic policies, 0.45

**Traditional trade policies, 0.26** 

#### RDTII (1.0) framework



#### Traditional trade policies

#### Digital governance

#### Other domestic policies

- Sales, delivery, advertising restrictions
- · E-payment limitations
- De Minimis limits
- · Restrictions on domain names
- Lack of legal framework
- Lack of transparency
- Lack of self-certification
- Product testing and screening issues
- · Encryption standard issues
- Import bans
- Other import restrictions
- Local content requirement
- · Export restrictions
- Lack of safe harbor
- Monitoring requirement
- Blocking/filtering
- · Strict licensing issues

8. Internet Intermediary Liability & Content Access

9. Non-

technical NTMs

- Lack of comprehensive data protection law
- · Data retention requirements
- Data Impact Assessment (DPIA) or Data Protection Officer (DPO)
- · Government access to personal data

- 11. Online sales & transactions
- Standards
   Procedures
- 1. Tariffs & Trade Defence
- Effective tariff rates
- · Zero-tariff coverage
- · Not in Information Technology Agreement (ITA)
- · Trade defence measures
- 2.Public Procurement
- Foreign exclusion
- Specific requirements
- · Other limitations
- Not in Government Procurement Agreement (GPA)
- 3. Foreign Investment Restrictions
- · Foreign equity limit
- Joint venture requirement
- Residency requirement
- · Investment screenings

- 4. IPRs
- Patent issues
- · Lack of clear copyright exceptions
- Copyright enforcement issues
- · Mandatory disclosure of trade secrets
- Overall IP protection

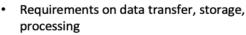
- 7. Domestic
  data Data Protection
  Data Privacy
- 6. Crossborder Data Conditions

**ESCAP Regional** 

**Digital Trade** 

**Integration Index** 

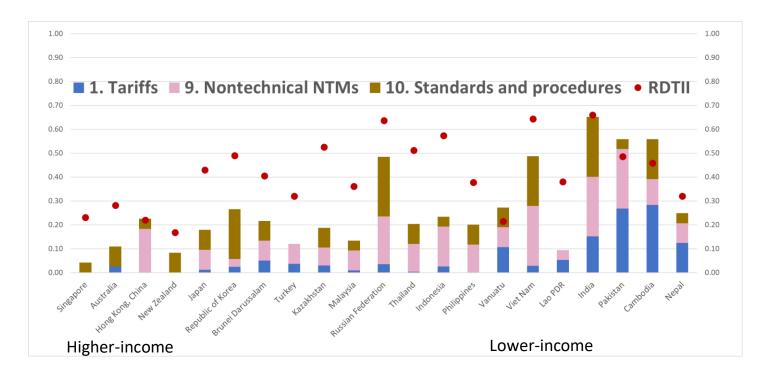
- 5. Telecom Regulations &Competition
- Lack of deregulation
- Anti-competitive practices
- Strict licensing issues



Requirements on consent, evaluation, approval



### Traditional trade policies



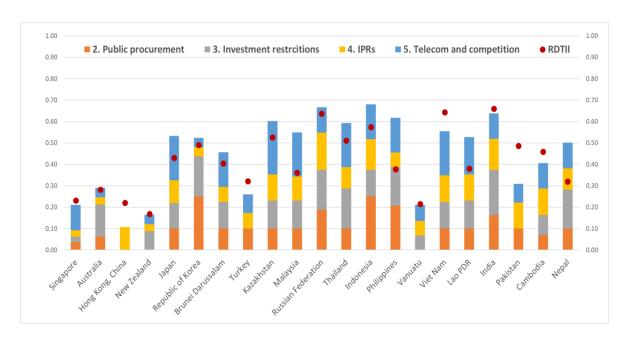


#### Common issues

- Not participating in the Information Technology Agreement (ITAI, II)
- Conditions on import licensing for digital devices
- Testing procedures and certification



### Domestic regulations



Higher-income Lower-income

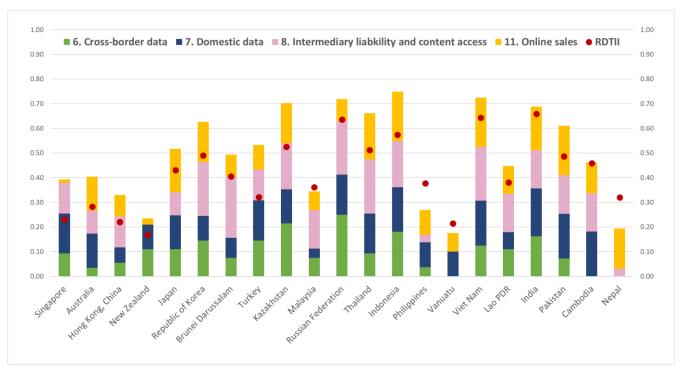


#### Common issues

- Screening conditions on investment and public procurement
- Conditions in copyright exceptions and patent filing
- Licensing and anti-competitive practices in the telecom market



### Digital-economy governance



Higher-income Lower-income



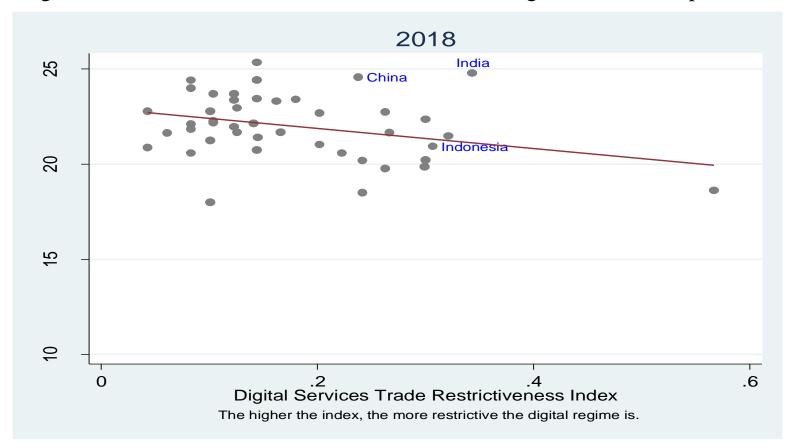
#### Common issues

- Varying conditions for data flow, data retention
- Blocking-, filtering-, monitoring-, local-presence requirements
- Conditions in e-commerce licensing and transactions, online consumer protections





#### Digital Services Trade Restrictions and Growth in Digital Services Exports



Source: <a href="https://stats.oecd.org/Index.aspx?DataSetCode=STRI\_DIGITAL#">https://stats.oecd.org/Index.aspx?DataSetCode=STRI\_DIGITAL#</a> (accessed July 10, 2021)

Higher digital services trade restrictions correspond with lower growth in digital services exports



# **Looking Ahead**

- Digital services exports offer opportunities to a wide spectrum of countries that differ in their mix of endowments and conditions and can help them integrate into regional and global markets
- Role of government important as competitive advantage in digital services trade is both natural and shaped
- Partnership between government and industry needed to keep pace with evolving technologies and digitalization possibilities, associated regulatory developments and to weigh the pros and cons of regulatory restrictions
- Regional integration and cooperation including through bilateral and regional agreements can enable greater regulatory convergence in digital trade regulations
  - Chapters on cooperation, e-commerce, R&D, investments, and mobility of persons, mode 1 commitments, especially in sectors such as financial services and cross-sector linkages between goods and digital services

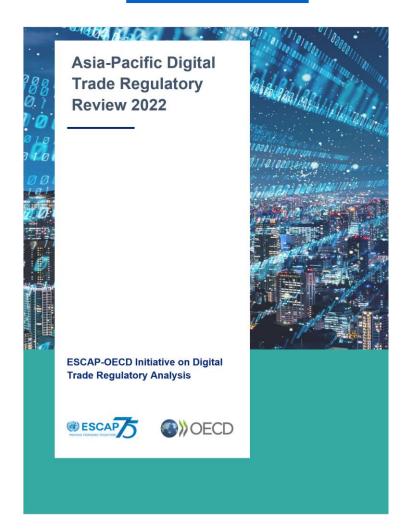
## **Toward Regional Integration**





# Thank you. Please find out more:

## **APDTR 2022**



## **RDTII**

