

Regional Cooperation Digital Trade in Asia-Pacific: Findings from trade agreements and implications for Vietnam

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Abstracts: Digital trade becomes the unprecedented trend, fuelled by the COVID-19 pandemic when economic actors are forced to find solutions to overcome social restrictions. The shift toward the digital-based economy also induced changes in patterns of digital trade. This article focuses on reviewing the prevalence of digital trade provisions in multilateral and regional trade agreements signed by at least one Asia-Pacific country members. Utilising the unique TAPED dataset on digital trade provisions, we analyse the breadth and depth of digital trade policies in terms of key issues.

1 Introduction

Digital trade as a critical policy topic can be construed in two ways—one narrow and one broad. In the former sense, digital trade is plainly equated to commerce in products and services delivered via the Internet. The second aspect is much broader and has to do with enabling innovation and the free flow of information in the digital networked environment.

The growth of global and regional services trade was disrupted with the emergence of COVID-19 in early 2020. In Asia and the Pacific, digital services trade saw a modest 1 per cent increase in 2020, whereas other regions experienced a slowdown. Asia's participation in digital services trade has expanded regionally and internationally, from \$120.8 billion for intra-regional services trade to \$483.5 billion by 2019 (ADB, 2022). 38.8 per cent of digitally deliverables services trade are intra-regional, and the region increasingly strengthen its link with other regions, especially Europe (27.5 per cent) and North America (22.2 per cent).

Increasing digital integration is a key driver of digital economy growth in the Asia Pacific, with governments in the region actively promoting it through regional cooperation and rulemaking. This process is complex and multi-dimensional, involving the alignment of regulatory structures, policy designs, digital technologies, and business processes along the supply chain. It also includes the free flow of digital services, data, capital, ideas, and talent, as well as the development of integrated physical and virtual infrastructure to ensure reliable interconnectivity.

This article steps toward a greater understanding of the digital trade policies in Asia-Pacific region by exploring the TAPED dataset, a comprehensive dataset covering 432 preferential trade agreements (PTAs) since 2000. This dataset extends to various legal aspects of digital trade provisions in trade agreements, categorise existing provisions as “hard” or “soft” to detect level of legally binding (Burri and Polanco, 2020). Through this comparative analysis, we made two contributions to literature of digital trade policies. First, we extend the coverage of digital trade aspects for PTAs including at least 1 Asia-Pacific member. Previous studies

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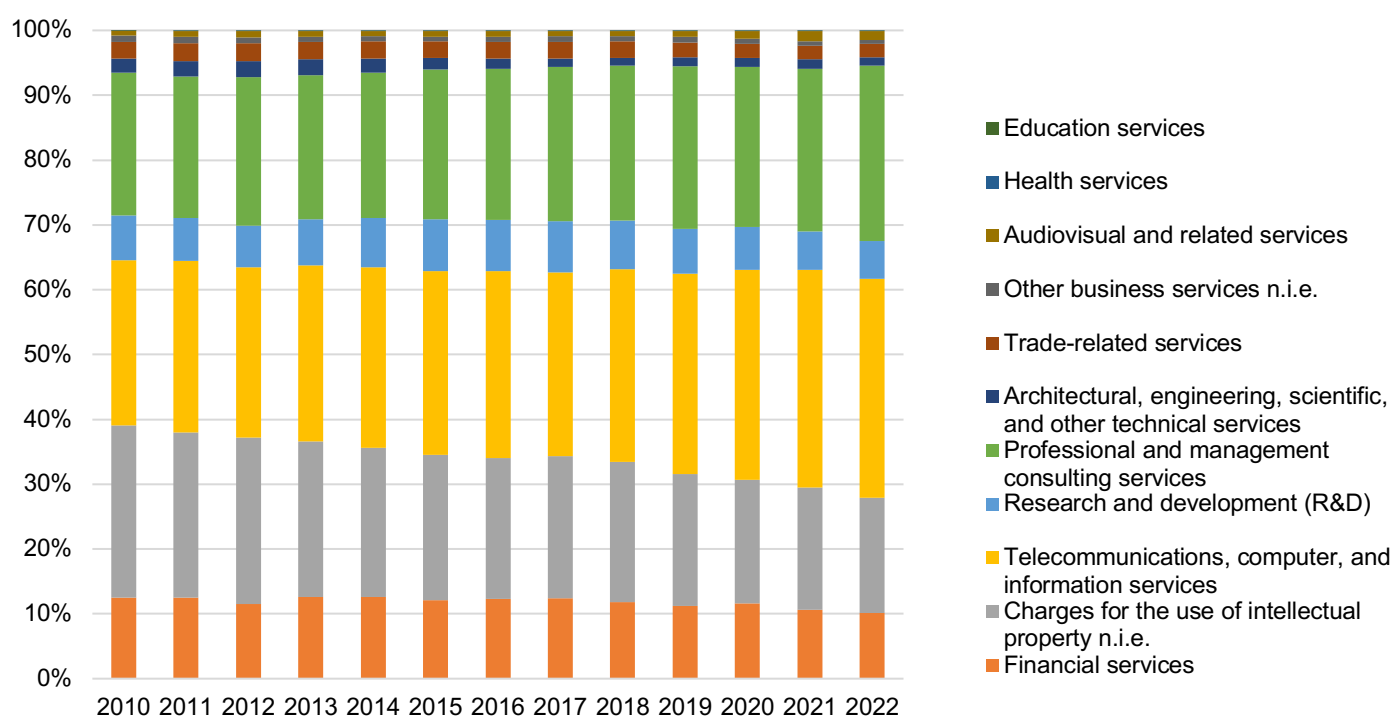
focus on the whole dataset, and in our article, we made efforts to disentangle the digital trade policies for Asia-Pacific countries only to further highlight the trends in regional trade policies. Second, we further compare 3 PTAs in which Vietnam has been a member, i.e., CPTPP, RCEP, ASEAN E-commerce Agreement to highlight the priority issues compared to regional trade. These are three agreements involving key digital trade partners of Vietnam since the large share of digitally delivered trade of Vietnam is intra-regional (TFGI, 2023b).

The article is structured as follows: the next section offers a brief overview of the digital trade landscape in the Asia-Pacific region. Section 3 focuses on the digital trade aspects covered in TAPED, specifically analysing 164 PTAs involving at least one Asia-Pacific country. Section 4 reviews key digital trade provisions in the CPTPP, RCEP, and ASEAN E-commerce Agreement, drawing out policy implications for Vietnam. The paper concludes with key insights on the future of digital trade governance in Vietnam.

2 Landscape of digital trade in Asia-Pacific

2.1 Trade in services across regions

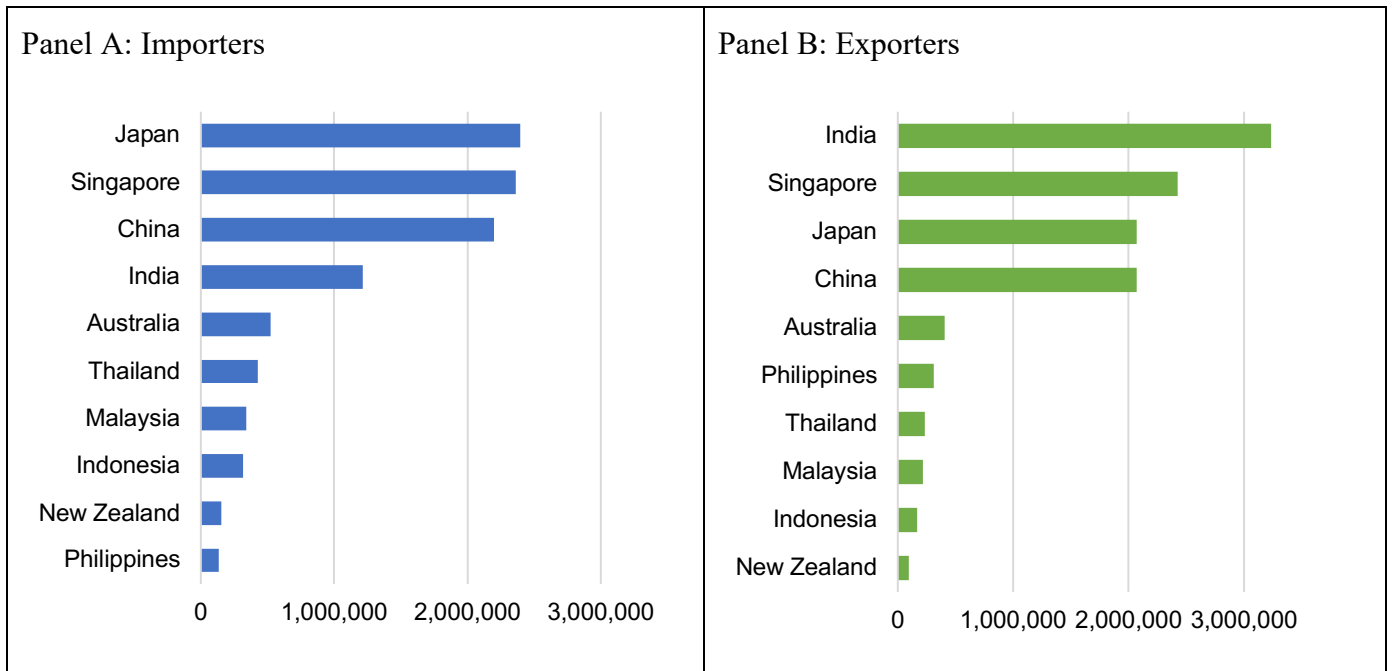
Figure 1 Share of digitally delivered services by years



Source: UNCTAD, based on UNCTAD Digital Economy Database (<https://unctadstat.unctad.org/wds/>).

Charges for the use of intellectual property n.i.e., telecommunications, computer, and information services, professional and management consulting are key contributors to digitally delivered services, in which the importance of telecommunications, computer, and information services, professional and management consulting increase substantially by years, reflecting the booming of Industrial 4.0 Revolution (Figure 1).

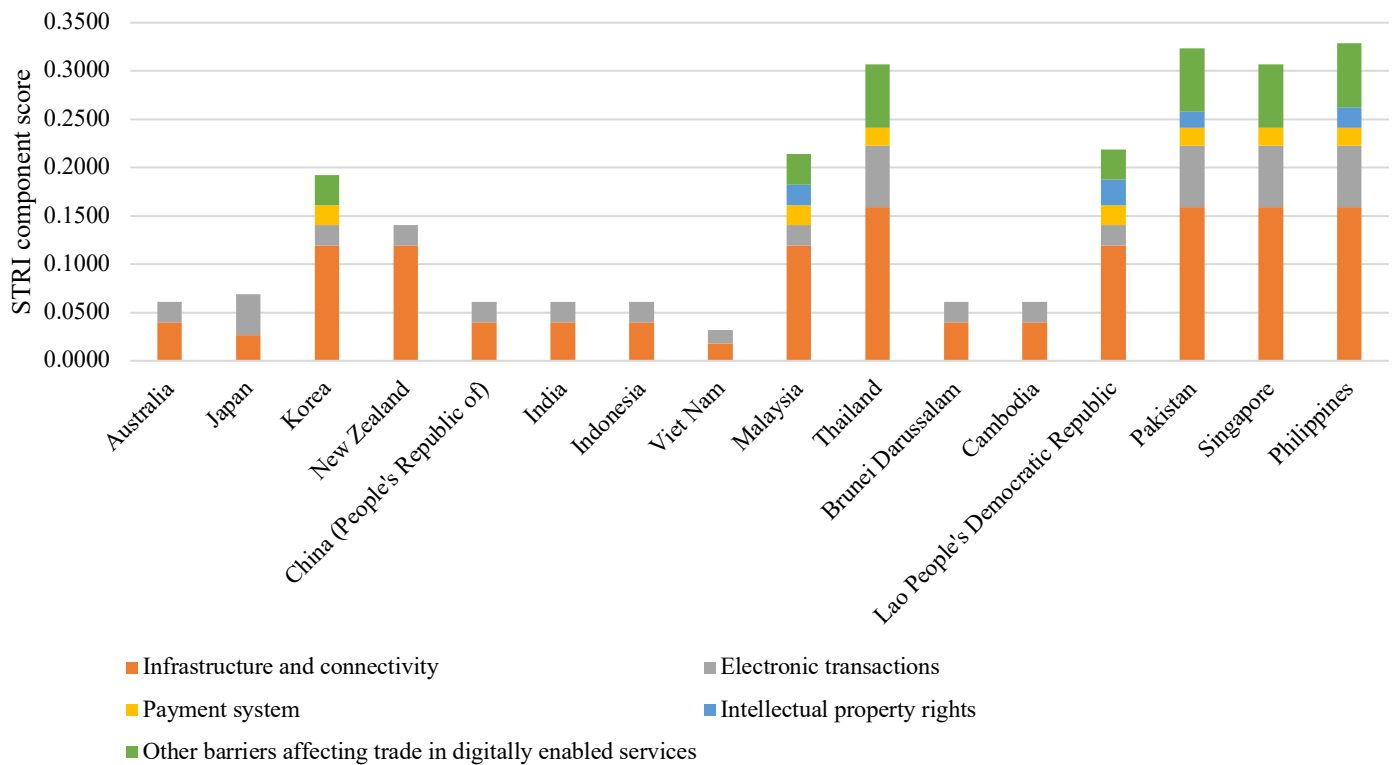
Figure 2 Top importers and exporters of digitally deliverables services in Asia from 2010 to 2020 (\$ million USD)



Source: UNCTAD, based on UNCTAD Digital Economy Database (<https://unctadstat.unctad.org/wds/>).

Japan, Singapore, and China are leading importers of digitally delivered services, with import values surpassing USD 2 trillion. Similarly, India, Singapore, Japan, and China are the most dynamic exporters in this sector, each achieving export values exceeding USD 2 trillion.

Figure 3 Digital STRI of selected Asia-Pacific economies, 2014-2022



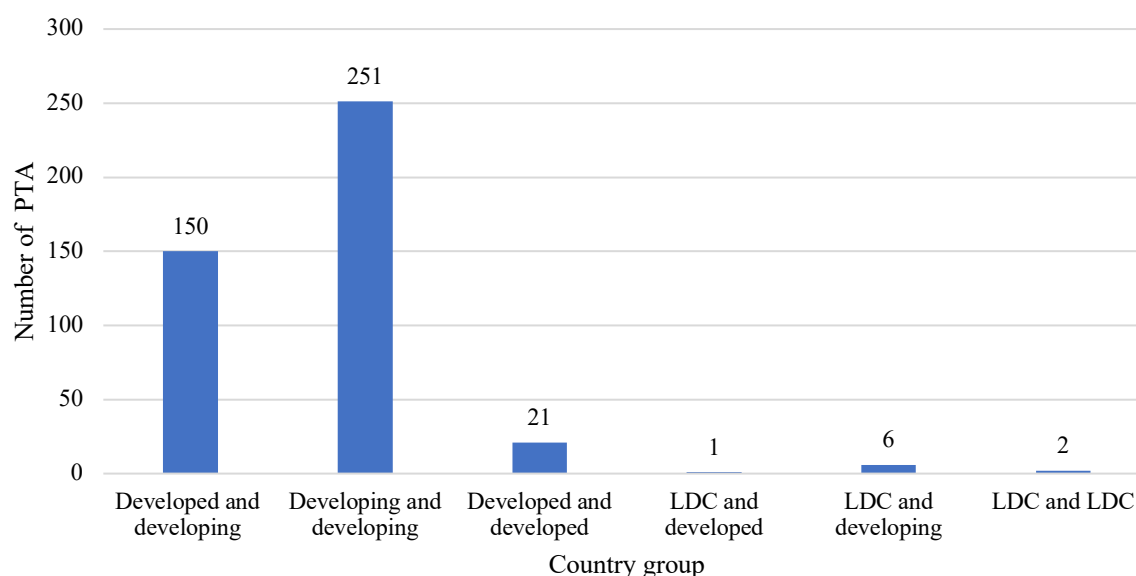
Source: Author's calculations based on OECD STRI database 2023

(https://stats.oecd.org/Index.aspx?DataSetCode=STRI_H)

In terms of restrictiveness to digital trade, Digital Services Trade Restrictiveness Index shows that infrastructure and connectivity appears the biggest cumbersome of the region. Despite significant investments in digital infrastructure in the region, gaps in technology access and connectivity still exist, potentially hindering digital trade and economic growth. According to a survey by ICC and Google, 65 per cent of ASEAN MSMEs reported problems with Internet access, including unreliable service or slow speeds, and issues with affordability (Hannah, 2024). The World Bank has also highlighted increasing evidence of a positive correlation between better Internet access, higher company productivity, and improved economic outcomes.

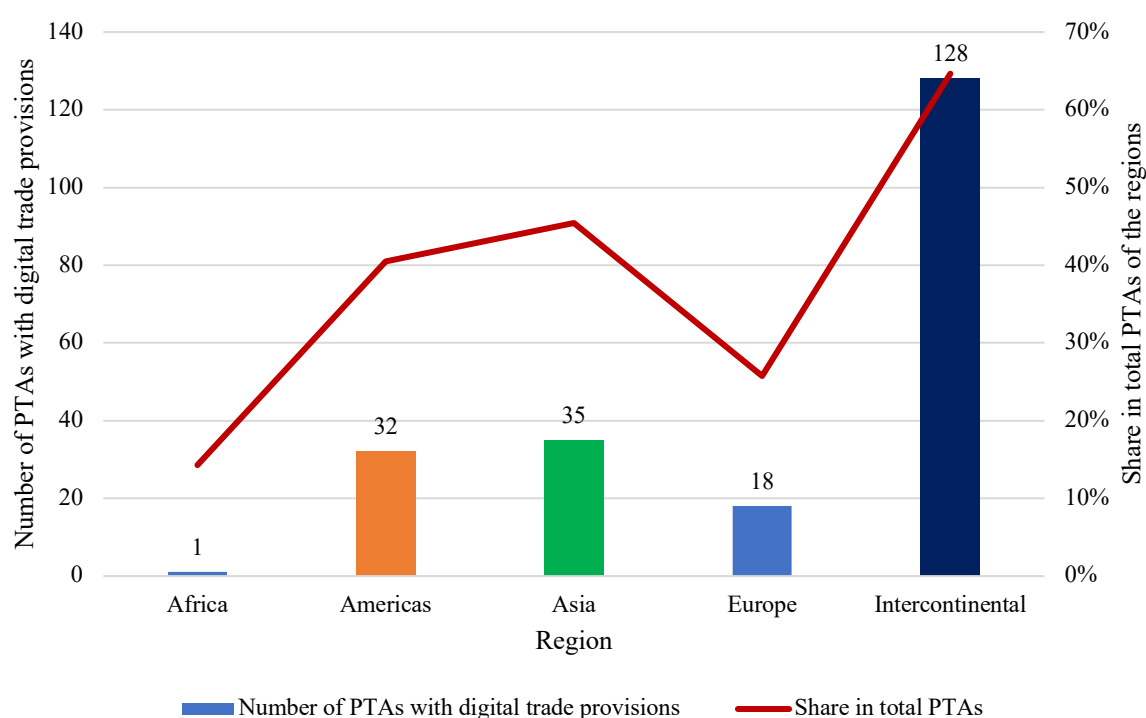
2.2 Digital trade emergence in trade agreements

Figure 4 Concluded PTAs between countries by income group



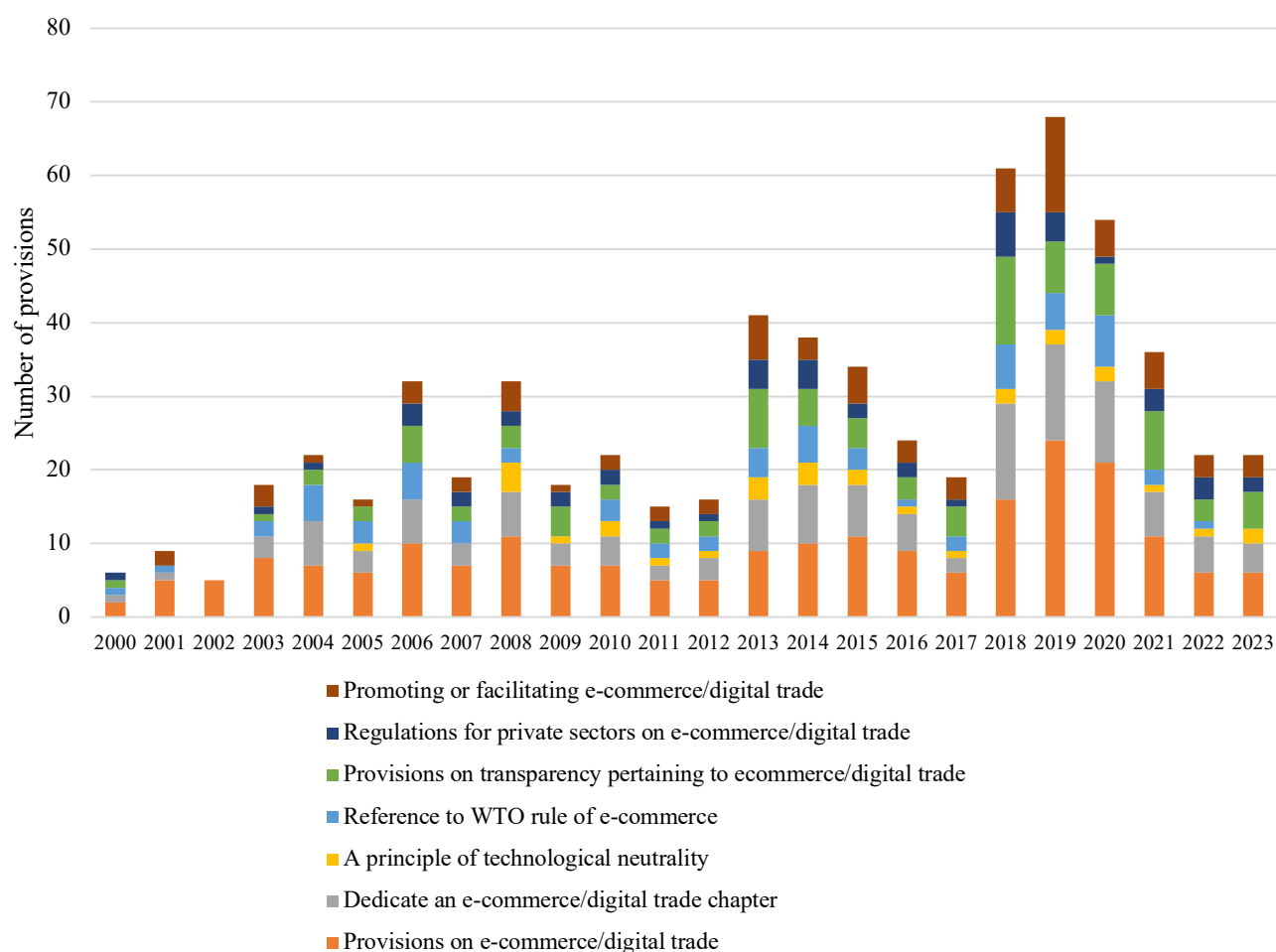
Developing countries are particularly active in forming trade agreements with both other developing countries and developed countries, with 251 PTAs with other developing countries and extend 150 PTAs with developed countries (Figure 4). In contrast, trade agreements involving least developed countries (LDCs) are far fewer, especially with developed nations. This may suggest challenges for LDCs in gaining access to broader trade networks, highlighting potential areas for international economic policy focus.

Figure 5 Number of PTAs with digital trade provisions



Source: Author calculation based on TAPED dataset (<https://digitaltradelaw.ch/taped/>).

Figure 6 General provisions related to digital trade from 2000 to 2023



Source: Author calculation based on TAPED dataset

⁵(<https://digitaltradelaw.ch/taped/>).

The majority of PTAs with digital trade provisions are intercontinental (128 PTAs, comprising 60 per cent of total intercontinental PTAs). There are around 35 PTAs in Asia region covering at least 1 aspect of digital trade (Figure 5). Africa is least-representative in terms of PTAs with digital trade provisions.

Digital trade provisions began being incorporated in PTAs since around 2005 (ESCAP, 2024). Digital trade is increasingly becoming an important issue in which PTAs dedicate at least 1 chapter covering this issue, especially popular since 2013 (Figure 6). Other comprehensive issues such as principle of technological neutrality, reference to WTO rule of e-commerce, regulations for private sector on e-commerce/digital trade are increasingly popular since 2018.

⁵ There are three levels of dedication of digital trade provisions, i.e., not include, soft regulations and hard regulations. In general, we count soft and hard regulation as “include regulations related to digital trade”.

2.3 *Multilateral cooperation in digital trade*

Multilateral cooperation in digital trade dates back to 1998 when the WTO adopted the Declaration on Global Electronic Commerce, which led to the creation of the Work Programme on E-commerce. This initiative was designed to analyse all trade-related aspects of e-commerce, assess the connection between existing WTO agreements and e-commerce, and update the rules if necessary. Although cooperation on e-commerce has persisted with ongoing discussions, tangible results have been limited (Burri and Polanco, 2020).

One of the most significant outcomes of the Work Programme has been the moratorium on customs duties for electronic transmissions. Although this moratorium has been renewed every two years since its inception in 1998, its status remains temporary. Additionally, the WTO Trade Facilitation Agreement (TFA), which came into effect in 2017, contributes to the digitalization of trade. It includes provisions that encourage the acceptance of electronic documents and the use of electronic payments by government authorities, further supporting the shift towards digital trade (Elsig and Klotz, 2021).

Despite minor regulatory changes introduced through the Information Technology Agreement and the Fourth Protocol on Telecommunications Services, WTO law largely remains in a pre-Internet state. Some argue that existing WTO law can address digital trade issues, as the WTO's judicial body has interpreted and applied its rules in various Internet-related trade disputes (Ismail and Mwangi, 2018). However, there is still considerable debate and concern about the adequacy of applying WTO rules, which were created in the pre-digital era, to modern digital trade. Due to the stagnation of the Work Programme on E-commerce, a group of 76 WTO members launched exploratory efforts in 2019 aimed at future WTO negotiations on e-commerce. Through the Joint Statement Initiative on E-commerce (JSI), these members committed to pursuing a high-standard outcome that builds upon existing WTO agreements and frameworks, with the goal of involving as many WTO members as possible. By February 2023, 89 WTO members were participating in these ongoing discussions, representing more than 90 per cent of global trade (Andrenelli and Gonzalez, 2023).

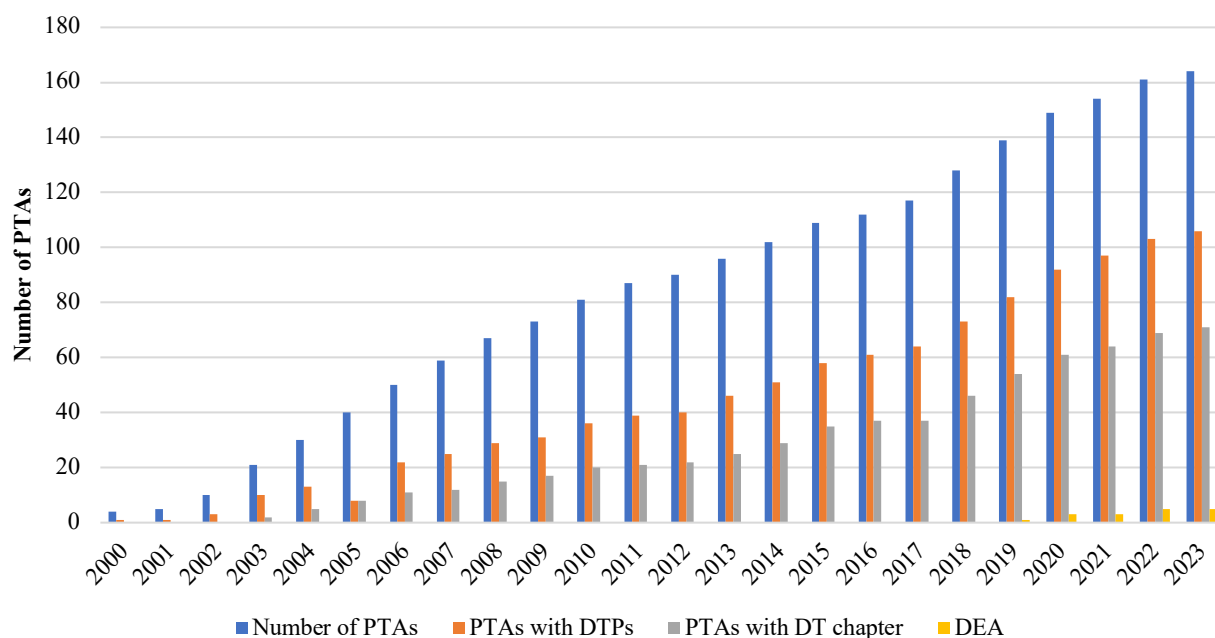
3 Regional cooperation in digital trade

3.1 *Revolution of digital trade provisions in PTAs*

Out of the 432 PTAs reviewed, 184 were found to include provisions related to digital trade. The majority of these provisions are concentrated in the e-commerce and intellectual property chapters. However, the provisions are highly varied, addressing a range of issues such as customs duties, non-discriminatory treatment of digital products, domestic regulatory frameworks, electronic signatures, consumer protection, data protection, paperless trading, and unsolicited electronic messages. When viewed chronologically, it becomes clear that the inclusion of digital trade provisions, particularly those explicitly referencing e-commerce, is not a recent development, though it has expanded significantly over the last two decades. The first e-commerce provision appeared in the 2000 Free Trade Agreement (FTA) between Jordan and the United States. By 2003, the Australia-Singapore FTA (SAFTA) became the

first PTA to include a dedicated chapter on e-commerce (Burri and Polanco, 2020). Digital Economy Agreement (DEA) was initiated since 2019. Singapore was the leading country in New Digital Economy Partnership (DEPA) agreement with Chile and New Zealand, and DEPA becomes first of a kind economic agreement and trade in digital area (Ministry of Trade and Industry Singapore, 2024).

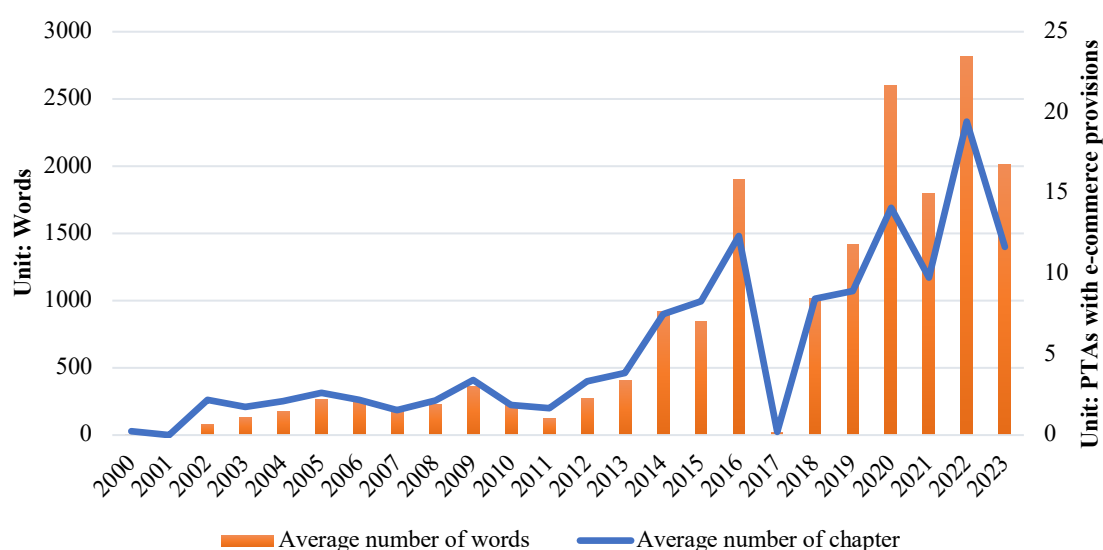
Figure 7 Number of PTAs signed by at least one country in Asia-Pacific region



Source: Author calculation based on TAPED dataset (<https://digitaltradelaw.ch/taped/>).

It is widely believed that digital trade provisions in PTAs are built upon existing WTO rules. As a form of regime-shifting, PTAs are also seen as a way to address gaps and unresolved issues left by the multilateral system. However, when examining the e-commerce chapters of PTAs, most do not contain provisions explicitly referencing the application of WTO rules to e-commerce. It is evident that the level of detail has also increased substantially over years, showing by the average number of 1476 words covering digital trade provisions (Burri and Polanco, 2020).

Figure 8 Size of digital trade chapters and provisions

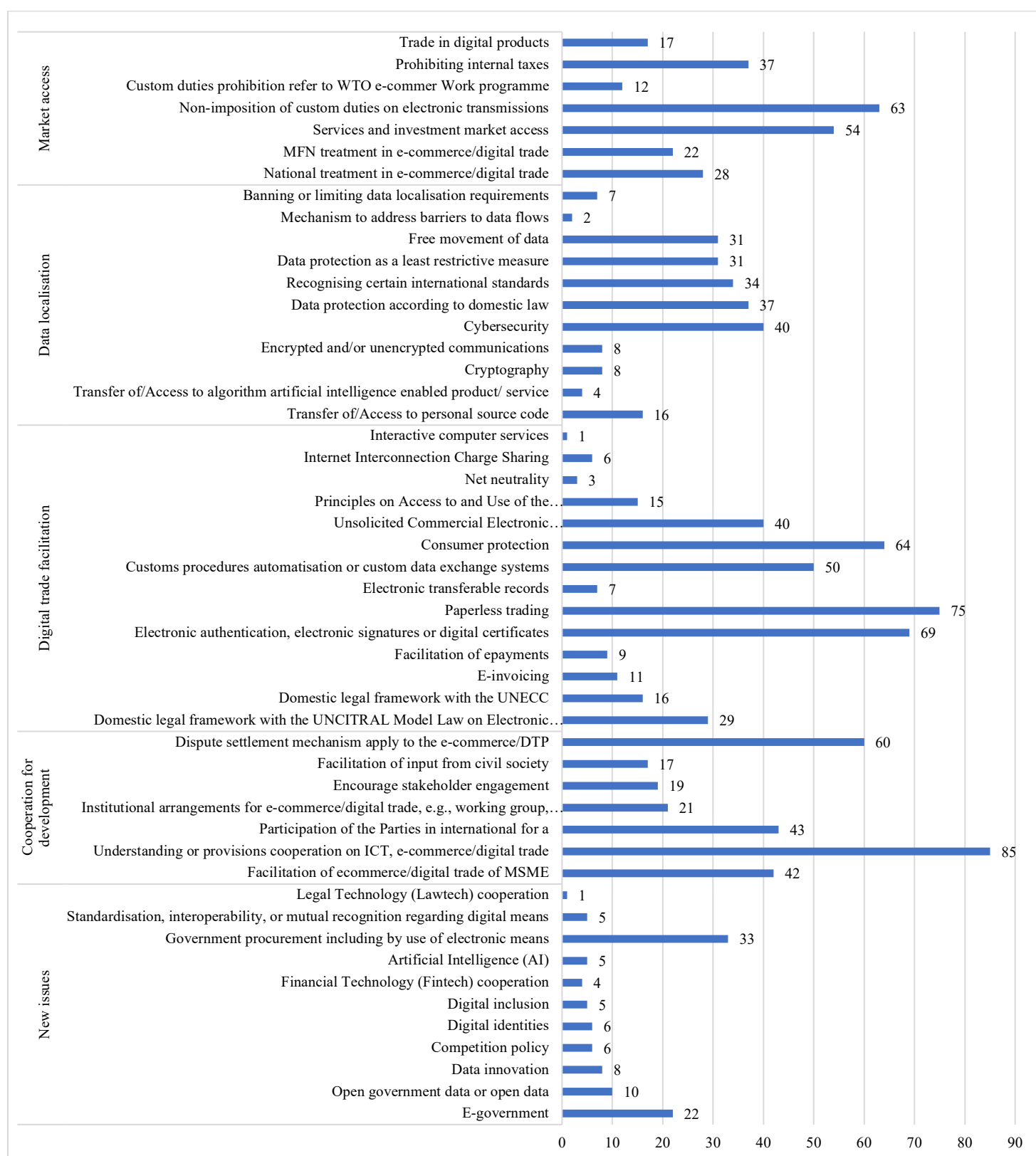


Source: Author calculation based on TAPED dataset (<https://digitaltradelaw.ch/taped/>).

3.2 Thematic analysis of key issues in digital trade provisions

Among 432 PTAs in the dataset, we analyse 164 PTAs include at least 1 Asia-Pacific countries member. Figure 9 shows the disaggregation of digital trade provisions by 5 aspects, including (1) market access, (2) data localization, (3) digital trade facilitation, (4) corporate for development, and (5) new issues.

Figure 9 Thematic analysis of key issues in digital trade for Asia-Pacific countries



Source: Author calculation based on TAPED dataset (<https://digitaltradelaw.ch/taped/>).

3.2.1.1 Market access

It is often assumed that digital trade provisions in PTAs build upon existing WTO rules. PTAs are expected to shift the regulatory regime by filling gaps and addressing unresolved issues left by the multilateral framework. However, an examination of e-commerce chapters in PTAs reveals that most do not explicitly reference the applicability of WTO rules to e-commerce. In fact, out of 164 PTAs involving Asia-Pacific countries, only 12 explicitly mention the WTO E-commerce Work Programme.

One clear link to the WTO is through the provisions on the “moratorium on customs duties”. Since the initiation of the WTO E-Commerce Work Programme, members have extended the moratorium on imposing customs duties on electronic transmissions at every Ministerial Conference, though they have yet to make it a permanent rule. The ban on customs duties remains one of the most prevalent provisions in PTAs that govern digital trade, appearing in 64 agreements. This provision provides legal certainty for digital commerce, particularly for downloadable goods such as software, e-books, and music. Additionally, market access for services and investment is addressed in 54 agreements, highlighting the importance of ensuring that digital services, like cloud computing and e-commerce platforms, can freely operate across borders.

3.2.1.2 Data localization

Data-related provisions, a recent addition to PTAs, are mainly found in e-commerce chapters, addressing cross-border data flows and data localization restrictions. These provisions also appear in sectors like telecommunications and financial services, where data flows are essential to the services provided. It should be noted that the data flows provisions analysed above is that almost all data localization clauses found in PTAs are of a binding nature

Cybersecurity is covered in 40 PTAs, indicating the growing importance of protecting digital infrastructure and trade from cyber threats. Meanwhile, provisions on **cryptography** and **encrypted communications** (8 PTAs each) reflect more specialized concerns with securing data in the digital economy.

The protection of data varies significantly, as parties may adopt different legal approaches to safeguarding personal information. This can involve establishing or upholding a legal framework that aligns with either the domestic laws of the signatories or international standards. In particular, data protection is adhered to domestic framework (37 PTAs) and international standard (31 PTAs). To facilitate digital trade, 31 PTAs explicitly mentions data protection as a least restrictive measure.

Some agreements, particularly those led by the EU, include dedicated chapters on personal data protection, outlining specific principles such as purpose limitation, data quality and proportionality, transparency, security, rights to access, rectification, and objection⁶. They also address restrictions on onward data transfers, protection of sensitive data, and provisions for enforcement mechanisms. Additionally, these chapters emphasize consistency with

⁶ For example: EVFTA, Korea-Vietnam FTA, EAEU – Vietnam, EU – Korean FTA.

international commitments and cooperation between parties to ensure an adequate level of personal data protection (Honey, 2021).

3.2.1.3 Digital trade facilitation

Paperless trading is the most commonly included digital trade facilitation provision, found in 75 agreements. These provisions generally involve commitments to make trade administration documents available electronically or to accept electronically submitted documents as legally equivalent to their paper counterparts. Paperless trading can apply to interactions between states, between a state and private entities, or between private entities.

The first instance of a paperless trading provision appeared in the 2000 New Zealand-Singapore Closer Economic Partnership Agreement (CEPA), included in the trade in goods chapter as part of the implementation of the Asia-Pacific Economic Cooperation (APEC) Blueprint for Action on Electronic Commerce's Paperless Trading Initiative. Some agreements also address the development of a single government customs window⁷, aligned with international standards, while allowing each party to maintain its own requirements and conditions.

In certain PTAs, paperless trading provisions are incorporated into broader cooperation commitments. Another category, usually found in e-commerce chapters, involves accepting electronic trade administration documents as legally equivalent to their paper versions. These provisions are often framed as best-effort commitments⁸, though in some cases they are mandatory⁹. Additionally, some PTAs include commitments to make trade administration documents available to the public in electronic form.

Electronic authentication and signatures, found in 69 PTAs, are essential for ensuring the validity of digital transactions. Since 2004, PTAs have increasingly included binding commitments on electronic authentication and digital certificates, with both restrictive and facilitative obligations. These commitments address the recognition of certificates issued by public and private entities. For public authentication, agreements promote government-level recognition based on international standards or cooperation between national accreditation bodies¹⁰. In the private sector, PTAs encourage the use of interoperable electronic authentication, trust services, and the mutual recognition¹¹ of digital certificates and signatures, often involving third-party services¹² and advanced certificates. Parties may also work to streamline accreditation processes for certification service providers.

Consumer protection provisions appear in 64 PTAs, underscoring the importance of safeguarding consumers from fraudulent practices in digital commerce. Additionally, provisions on **unsolicited commercial electronic messages (spam)**, present in 40

⁷ Chile-China FTA (2018), Australia – Chile FTA (2009)

⁸ Central America-Korea FTA, China-Korea FTA, Singapore-Sri Lanka FTA, Singapore-Turkey FTA, New Zealand-Thailand FTA, Australia-Japan FTA, Australia-Korea FTA, RCEP.

⁹ Australia-Indonesia CEPA; Australia-Singapore FTA (2016); Australia-China FTA, Art. 12.9.1; Chile-Thailand FTA, Australia-Malaysia FTA, Australia-Singapore FTA (2003).

¹⁰ Korea-Peru FTA, Korea-Vietnam FTA, Korea-Singapore FTA

¹¹ Australia-Indonesia FTA, Australia-Peru FTA, Australia-Singapore FTA,

¹² EAEU-Vietnam FTA

agreements, aim to protect consumers from unwanted communications and enhance trust in digital platforms. Although they are considered soft law and often lack detailed legal specifications, provisions for online consumer protection are crucial for ensuring a trusted and secure digital trade environment. Over time, these provisions have become standard rules in digital trade agreements¹³.

Customs procedures automation is included in 50 PTAs, reflecting efforts to modernize customs through digital technologies and improve the efficiency of cross-border trade. Related to this, **electronic transferable records** (7 PTAs) and **e-invoicing** (11 PTAs) are less frequently mentioned but represent important steps toward fully digitizing trade documentation and payments.

3.2.1.4 Corporation for digital trade development

Cooperation for development provisions is essential for ensuring that all countries, particularly developing ones, can participate in and benefit from the digital economy.

The provision for the **facilitation of e-commerce/digital trade for MSMEs** (42 PTAs) emphasizes the need to include micro, small, and medium-sized enterprises (MSMEs) ¹⁴in digital trade by reducing barriers and providing support for digital adoption.

Institutional arrangements for cooperation on digital trade, such as the establishment of working groups or committees, are included in 21 PTAs, demonstrating the importance of structured collaboration between governments on issues like technology transfer and regulatory harmonization.

The **participation of parties in international fora** on digital trade (43 PTAs) is a critical mechanism for aligning national policies with international standards, fostering dialogue, and promoting consensus on digital governance.

3.2.1.5 New issues

As digital trade evolves, new challenges emerge, necessitating provisions that address modern technological and societal developments.

Open government data and **e-government** provisions, found in 22 PTAs, reflect efforts to improve public sector transparency and efficiency by promoting the use of digital technologies in governance. These provisions encourage the sharing of data between governments and the public, fostering innovation and improving public services.

Artificial intelligence (AI) and **Fintech cooperation** provisions, found in 5 and 16 PTAs respectively, reflect the early stages of addressing cutting-edge technologies in digital trade. As AI and Fintech play increasingly prominent roles in the digital economy, these provisions signal a growing awareness of the need to govern their use in trade.

¹³ For example: EVFTA, UK-Vietnam FTA, Korea-Vietnam FTA, EAEU Vietnam FTA.

¹⁴ For example: EVFTA, UK-Vietnam FTA, Cambodia-China FTA, Malaysia-Australia FTA.

Competition policy related to the digital economy (8 PTAs) is a growing area of concern, ensuring that digital markets remain fair and open, preventing monopolistic practices, and promoting innovation.

3.3 Emergence of new model of digital trade agreements

In the past four years, 6 Digital Economy Agreements (DEAs) have been adopted: the US-Japan Digital Trade Agreement (USJPDTA, 2019), the ASEAN Agreement on Electronic Commerce (ASEAN AEC, 2019), the Australia-Singapore Digital Economy Agreement (ASDEA, 2020), the Digital Economy Partnership Agreement (DEPA, 2020) between Chile, New Zealand, and Singapore, the UK-Singapore Digital Economy Agreement (UKSDEA, 2022), and the most recent, the Korea-Singapore Digital Partnership Agreement (KSDPA, 2022). All of these DEAs involve at least one party from the Asia-Pacific region, with Singapore being the most active country in signing such agreements.

Digital Economy Agreements (DEAs) build on existing commitments while expanding digital trade provisions, such as automating customs procedures and granting electronic transferable records the same legal status as paper documents. DEAs further strengthen governance in areas like cross-border e-commerce, free data flow, and the protection of personal data and intellectual property.

A new feature of DEAs is the use of consensus modular around issues. For example, DEPA is organised around 12 modules on Business and Trade Facilitation, Digital Identities, and Digital Inclusion, among others (Figure 10). Countries can choose to join DEAs as a whole, adopt specific modules into existing or future agreements, or integrate them into other trade negotiations, which provides significant flexibility for countries in their approach to digital trade agreements (Lee, Banh and Tan, 2024).

Figure 10 Key features of digital economy agreement

Key Features

Facilitate end-to-end digital trade:

Digital Identities

Develop safe and secure digital identities that are mutually recognised.



E-invoicing

Shorter invoice processing time, faster payment and cost savings when similar e-invoicing standards are adopted.



Paperless Trade

Reduce time for document transit and cargo clearance, resulting in lower operating costs.



FinTech and E-Payments

Promote cooperation among companies in the FinTech sector and develop FinTech solutions for businesses.



Enable trusted data flows:

Personal Data Protection

Develop mechanisms to protect personal data being transferred across borders, based on international frameworks.



Open Government Data

Expand access to, and use of, open government data to generate new opportunities for businesses, especially SMEs.



Cross-border Data Flows

Businesses can transfer information across borders and serve their customers, regardless of where they are located.



Data Innovation and Regulatory Sandboxes

Facilitate the development of new products and services by promoting data-driven innovation across borders.



Build trust in digital systems and facilitate opportunities for participation in the Digital Economy:

Artificial Intelligence

Promotes the adoption of ethical AI governance frameworks, which factor in principles that the countries have agreed to, in order to harness AI in a responsible manner.



These include: (i) AI should be transparent, fair and explainable, and (ii) AI must have human-centred values.

SMEs Cooperation

Capacity-building efforts such as a Digital SME Dialogue to promote information sharing and exchange.



Online Consumer Protection

Adopt or maintain laws and regulations that guard against fraudulent, misleading or deceptive conduct that causes harm to consumers engaged in online commercial activities.



Digital Inclusivity

Remove barriers to the digital economy and promote digital inclusion and participation.



Source: Ministry of Trade and Industry of Singapore, 2023

4 Digital trade agreements where Vietnam as a member

This section summarises the comparative analysis of 4 agreements related to digital trade that Vietnam is currently a member, including CPTPP, RCEP, ASEAN E-commerce agreement. ASEAN Digital Economy Framework Agreement has been in the process of negotiation and expected to be concluded by 2025, becoming the world's first region-wide and legally-binding digital (TFGI, 2023a).

4.1 Scope of electronic commerce provision

CPTPP and RCEP dedicate a chapter for electronic e-commerce (Chapter 12 – CPTPP and Chapter 14 – RCEP). This chapter covers measures affecting e-commerce, excluding government procurement and information processed or held by or on behalf of a party¹⁵. These provisions do not apply to financial institutions and services.

The e-commerce chapter must be read in conjunction with other chapters, including trade in services and investment (Chapter 8 and 10 – RCEP), and financial services (Chapter 9, 10, 11 – CPTPP). Similarly, The ASEAN E-Commerce Agreement exempts government

¹⁵ RCEP Art. 12.3; CPTPP Art. 14.2

procurement from its scope and excludes data-related provisions from applying to financial services and service providers.

RCEP explicitly refers to the WTO Work Programme on E-commerce for rules applied to customer duties on electronic transmission. However, CPTPP does not refer to WTO work programme but simply prohibit the imposition of customs duties on electronic transmissions, including content transmitted electronically.

4.2 Provisions related to trade facilitation

Regarding trade facilitation, RCEP covers 2 issues of paperless trading (Art. 12.5) and Electronic Authentication and Electronic Signature (Article 12.6). Two agreements call for the corporation in international fora to accelerate the acceptance of trade administration documents. Similar rules are also mentioned in CPTPP (Article 14.6 and 14.9). Both the CPTPP and RCEP (in contrast to DEPA, as explained below) do not address the facilitation of electronic payments and invoices. Such provisions have become common in some recent PTAs, but otherwise absent in the majority of treaties (Mishra and Valencia, 2023). The ASEAN E-Commerce Agreement requires parties to enact laws on electronic transactions, considering international conventions and allowing flexibility for adoption, particularly for LDC members (Myanmar and Cambodia). It mandates the legal recognition of electronic signatures, the adoption of international norms for electronic authentication, and promotes interoperability. Additionally, Article 7.1 encourages the use of electronic trade documents and the exchange of such documents via ICT.

The CPTPP and RCEP include provisions on electronic transactions, requiring parties to uphold domestic laws aligned with international conventions, such as the UNCITRAL Model Law on Electronic Commerce (1996) or the United Nations Convention on the Use of Electronic Communications in International Contracts.

4.3 Provisions related to online consumer trust and data protection

Another issue emerging in the digital era is the protection of consumers. Most PTAs contain many kinds of provisions to protect consumers from online data breach, cybersecurity, and many other cyber-threats.

Both the CPTPP and RCEP include provisions to enhance consumer trust, requiring parties to implement consumer protection laws for online commerce and promote cooperation between consumer protection agencies. Both agreements mandate the publication of information on remedies for online consumers and business compliance guidelines (Art 12.7.4 RCEP and 14.8.4. CPTPP). Additionally, both agreements require parties to adopt personal data protection laws, with the CPTPP encouraging the consideration of international standards, while the RCEP makes this a binding requirement.

Cybersecurity is an important block in almost all PTAs, apparently existing in 40 PTAs in Asia. In CPTPP and RCEP, both agreements leave soft commitments on cybersecurity focusing capacity building and cooperation to detect cybersecurity matters. Both treaties consider the case of small-and-medium enterprises and call for assisting them to leverage in the digital trade issue. Similarly, ASEAN E-commerce Agreement also adhere two important issues as mentioned, but it specifies in detail areas to improve such as information and

communication technologies ('ICT') infrastructure, 'education and technology competency', 'intellectual property rights', 'competition', and 'logistics to facilitate e-commerce' (Art. 6).

4.4 Cross-border data flows and data localization

Data localisation and cross-border data flows are new issues to digital trade provisions, and very few PTAs in Asia (fewer than 10) contain provisions explicitly mention the data localization and cross-border data flows.

CPTPP includes the provisions about cross-border data flows in 3 chapters: (1) financial services, (2) electronic commerce, (3) telecommunication services to cover all online services that include data transfer. The CPTPP permits parties to implement measures that may deviate from these provisions to pursue a "legitimate public policy objective", provided that such measures: first, are not applied in a way that results in arbitrary or unjustifiable discrimination or acts as a disguised trade restriction; and second, do not impose restrictions beyond what is necessary to achieve the intended objective. The RCEP includes an exception similar to the CPTPP and DEPA but adds a self-judging element, allowing the implementing party to solely determine the necessity of a legitimate public policy objective. It also permits restrictions on cross-border data transfers or data localization if deemed necessary for protecting essential security interests, with such measures being non-disputable by other parties. This reflects RCEP's flexibility, accommodating diverse digital regulation policies (e.g., China's and Vietnam's strict cyber-sovereignty versus Australia's and Japan's support for data free flow). However, this provision introduces uncertainty for digital businesses, as data localization measures in some Asian countries cannot be challenged under RCEP.

Figure 11 Comparison of Digital-Related Clauses in Major Digital Economy Agreements

Item	UKSDEA	SADEA	DEPA	CPTPP	RCEP	AAEC	Others	New DEA
Digital trade provisions commitments to facilitate digital trade	✓	✓	✓	✓	✓	✓		
No customs duties on electronic transmissions	✓	✓	✓	✓	✓		5	3
Non-discrimination of digital products	✓	✓	✓	✓			4	3
Domestic electronic transactions framework	✓	✓	✓	✓	✓	✓		
Electronic authentication and signatures	✓	✓	✓	✓	✓	✓		
Cross-border transfer of information by electronic means	✓	✓	✓	✓	✓	✓		
Paperless trading	✓	✓	✓	✓	✓	✓		
Electronic invoicing	✓	✓	✓				3	3
Electronic payments	✓	✓	✓			✓		
Express shipments	✓	✓	✓	✓			3	2
Online consumer protection	✓	✓	✓	✓	✓	✓		
Cooperation on competition policy	✓	✓	✓				3	3
Personal information protection	✓	✓	✓	✓	✓	✓		
Unsolicited commercial electronic messages	✓	✓	✓	✓	✓		5	3
Submarine telecommunications cable systems	✓	✓					2	2
Location of computing facilities for financial services	✓	✓					2	2
Data innovation	✓	✓	✓				3	3
Open government data	✓	✓	✓				3	3
Source code	✓	✓		✓			3	2
Digital identities	✓	✓	✓				3	3
Standards and conformity assessment for digital trade	✓	✓					2	2
Artificial intelligence	✓	✓	✓				3	3
Fintech and Regtech cooperation	✓	✓	✓				3	3
Dispute settlement	✓	✓	✓	✓	✓	✓		
Number of Clauses	23	24	19	13	10	9		

Source: Sefrina (2023). ERIA Policy Brief.

4.5 Implications for Vietnam digital economy

Becoming a member of CPTPP and RCEP, Vietnam has various opportunities to leverage its potential in digital area. Vietnam digital economy's boom is driven by the rapid growth of e-commerce sector, which hit US\$ 14 billion in 2023 (TFGI, 2023b). Over a past decade, the Government has proactively laid a strong foundation for digital economy development, reflected in the implementation of policies umbrellaed the government's Digital Transformation Agenda (DTA). Regarding important aspects of digital trade, there are several policies that need to be considered.

The **E-Commerce Law (2005)** provides a strong foundation for digital transactions by recognizing electronic signatures and digital contracts, which is crucial for fostering e-commerce and related activities. In September 2021, **Decree No. 85/2021/ND-CP** amended the earlier regulations set by **Decree No. 52/2013/ND-CP** from 2013, extending Vietnamese regulations to include cross-border e-commerce activities conducted by foreign enterprises for the first time. However, since the law is outdated, further modernization is necessary to address the demands of the rapidly evolving digital economy, including incorporating new technologies like blockchain, artificial intelligence.

The **Cybersecurity Law (2018)** strengthens data security and ensures the safety of digital infrastructures, fostering trust in online transactions. However, its **data localization** requirements, which mandate that certain types of data be stored on local servers, are viewed as restrictive. While the law aims to protect national security, it can limit Vietnam's ability to fully participate in global digital trade systems by increasing operational costs for multinational companies and creating barriers to cross-border data flows. This can deter foreign investment and hinder Vietnam's integration into global digital value chains. Vietnam's **data localization requirements** under **Decree 53/2022** also present challenges. While aimed at protecting national security by keeping sensitive data within the country, these measures may inhibit foreign companies from expanding in Vietnam, as compliance can be costly. This restricts innovation and limits Vietnam's participation in the global digital economy, making it harder to capitalise on international digital trade opportunities.

Efforts to introduce **Personal Data Protection (PDP)** regulations align with global standards, fostering consumer trust and boosting Vietnam's attractiveness as a digital trade partner. However, the cost of compliance, particularly for SMEs, could be burdensome. Striking a balance between strong data protection and practical enforcement is crucial to prevent overburdening businesses while still accelerating digital trade.

While many efforts have been made on trade deals, it is essential to align above-mentioned policies to international standards, with the virtue of least trade-restrictive and highest level of protection. The government should effectively align international frameworks to national policies to formulate a comprehensive digital trade plan. Given the multilateral relationship of Vietnam with many partner countries, it is essential to ensure that regulations are aligned with multiple trading partners. Broad-based, non-discriminatory provisions support these more specific regulations by fostering convergence towards common principles and standards between trading partners. This alignment helps establish a mutual understanding of best practices and minimum requirements for data protection and data flows, ultimately promoting trust among trading partners. Regarding scope of digital trade regulation, greater efforts

should be made on data localisation and consumer protection, given the increasing operation of e-commerce giants in Vietnam. These regulations will also allow market diversity of digitally delivered services providers and improve consumer welfare. Regional effort is another crucial issue, given the fruitful discussion of ASEAN member to form Digital Economy Framework Agreement.

5 Concluding remarks

In conclusion, digital trade policies in the Asia-Pacific region are evolving rapidly. These frameworks aim to enhance digital connectivity, ensure data protection, and promote cross-border e-commerce while balancing national security concerns with global trade integration. A large number of PTAs dedicate a separate chapter, often electronic e-commerce to discuss relevant provisions to digital trade. Digital trade provisions increase breadth and depth, in which key contents posit in non-imposition of custom duties on electronic transmission, MFN/National treatment in e-commerce, cybersecurity, online consumer protection, paperless trading, and cooperation in legal framework for e-commerce.

Vietnam's participation in international agreements has positioned it well to capitalise on digital trade, but the country must address challenges posed by stringent data localisation and cybersecurity regulations. Aligning domestic policies with international best practices, fostering a more open digital trade environment, and ensuring flexibility in regulatory frameworks will be crucial for Vietnam's continued growth in the digital economy. By embracing these changes, Vietnam can strengthen its digital trade governance and enhance its competitiveness on the global stage.

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