Technology-empowered Digital Trade in Asia Pacific

December, 2021
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Summary of the trends

1. The next three years will remain a golden period for the development of digital trade, especially in the Asia Pacific region
   - Global digitalization has been enhanced, the pandemic has accelerated the digitalization process of consumers and businesses, and it is difficult to reverse the habit of online consumption once it is formed. Meanwhile, ASEAN has become China's largest trade partner thanks to the Belt and Road Initiative (BRI). In Southeast Asia, cross-border e-commerce platforms such as Lazada have emerged. They rush at China to recruit Chinese businesses on a large scale, hoping to import more Chinese goods to meet the needs of local consumers.
   - Digital technologies enable global sellers to participate in global trade without any barriers to entry. The continuous improvement of digital infrastructure will effectively help remove two major constraints affecting cross-border trade: logistics and payments. Blockchain technology is also creating a new space of imagination for digital trade.
   - The Regional Comprehensive Economic Partnership (RCEP) will promote regional cooperation, and facilitate regional digital trade in five aspects: removing tariff barriers, establishing flexible rules of origin, promoting e-commerce, enhancing trade facilitation, and focusing on small and medium-sized enterprises (SMEs) and technical cooperation.

2. Cross-border e-commerce and digitalization are shaping the relative pattern of digital trade development in the Asia Pacific region
   - The development levels of digital trade in major Asian economies are analyzed and compared from two dimensions, namely cross-border e-commerce and digitalization. Asian markets can be classified under three categories: mature markets, including China, South Korea, Singapore and Japan; developing markets, including Thailand, Malaysia, Indonesia, Vietnam and the Philippines; and early-stage markets, including Myanmar, Cambodia, Laos and Brunei.

3. Analysis of key countries in the Asia Pacific market
   - Singapore: Highly internationalized financial and maritime center renders Singapore an important market in Asia, even in the world. The Singaporean government actively promotes global digital trade, and the country has become a central hub for the headquarters of many cross-border e-commerce platforms in Southeast Asia.
   - China: Developed digitalization lays a solid foundation for China's e-commerce trade, which has entered a mature stage with huge development potential.
   - South Korea: South Korea is world-leading in terms of infrastructure digitization, and the country promotes the development of cross-border e-commerce from the perspective of its national strategy.
   - Japan: Strong logistics technologies that underpin the cross-border trade and infrastructure of digital economy have been perfected. However, cross-border e-commerce in Japan is still not open enough due to obstacles in the e-payment industry caused by population aging.
   - Malaysia: The growth rate of the e-commerce market ranks first among RCEP member states. However, limited by factors such as cross-border logistics infrastructure, cross-border e-commerce in Malaysia has not been developed significantly.

   • Indonesia: Demographic dividend, internet penetration rate and consumer habits create great potential for the development of e-commerce and cross-border e-commerce in Indonesia.
   • The Philippines: E-commerce has huge growth potential, but is constrained by a low internet penetration rate and an undeveloped e-payment industry.

4. Asia Pacific micro-multinationals are springing up rapidly
   - With the help of digital platforms, entrepreneurs and small businesses in the Asia Pacific region have become micro-multinational enterprises (mMNEs) as they are engaged in cross-border e-commerce across different markets. They provide diversified "locally-made products” and light customization services for global buyers.
   - Asia Pacific businesses have a higher degree of satisfaction with the digitalization of payments and sales among all the links of cross-border e-commerce. They make full use of platforms and tools to forge ahead. In terms of payments, they choose reliable cross-border payment platforms to improve the timeliness of capital flows and realize one-stop purchasing, order placement and payment collection. In terms of sales tools, they can efficiently find the correct direction for development by relying on various tools for selecting goods and uploading goods information with the help of big data analysis.
   - RCEP clearly supports the cross-border operation of e-commerce, so new formats of cross-border e-commerce such as independent websites are guaranteed by international rules, which is of great importance. Compared with third-party platforms, cross-border e-commerce with independent websites has the advantages of precision and flexibility. 70% of the surveyed enterprises plan to set up independent websites, which is already in place in 33.4% of the surveyed enterprises. Independent websites have become a key channel for enterprises to break the business ceiling or expand into new markets, as it attracts the attention of increasing export sellers.

5. Overseas warehouse emerges in response to higher requirements for the service level of cross-border logistics
   - In the context of cross-border e-commerce trade, overseas warehouses mean that domestic enterprises send goods to the target country through bulk transportation, set up warehouses and store goods in that country, and then immediately respond to local sales orders and directly carry out sorting, packaging and distribution in local warehouses in a timely manner.
   - The essence of overseas warehouses is to localize cross-border trade, improve consumer shopping experience, and thus boost the competitiveness of cross-border sellers in the export destination market. Its prominent advantages include reducing logistics cost, accelerating logistics timeliness, increasing product exposure, and enhancing shopping experience.

6. Competing cross-border payment institutions help cross-border e-commerce forge ahead
   - The rapid development of cross-border e-commerce is accompanied by highly intense competition in the third-party cross-border payments market. Cross-border payment platforms lower the cost and threshold of financial services and increase the utilization frequency of users relying on technical means. Furthermore, they have become an indispensable payment channel with the advantages of speed, convenience and high security. Specifically, WorldFirst occupies a share of over 40% in China, Japan and South Korea.
I. Ecology of digital trade in the Asia Pacific region emerges

1.1 Global trade enters an era of intelligence
Under the influence of technological advancements and in-depth international cooperation, among other factors, global trade has gone through four development stages.

(1) Traditional era: Initially, global trade mainly took the form of cross-border production and consumption based on the comparative advantages of various countries, and it primarily involved the trade of final products.

(2) Era of global value chains: With the deepening of economic globalization and the further reduction of transportation and coordination costs, the pursuit of production cost minimization drove enterprises to distribute production links over multiple countries, signifying that trade had entered the stage of intermediate goods and services.

(3) Era of digitalization: In recent years, with the accelerated development of digital technologies such as information communication, the popularity and sophistication of digitalized trade models and objects has grown and "digital trade" is surging forward. Digital technologies and trade refers to the domestic business and international trade activities during which digital trade objects represented by digital products (such as audio and video, software, etc.) and digital services (such as information technology services, and online healthcare).

(4) Era of intelligence: As digital technologies are upgraded, and the combination of digital technology and trade evolves to a deeper and more comprehensive level, digital trade has entered the era of intelligence. Data factors play a prominent part in this period. Important digital infrastructure, including 5G, will help build data distribution platforms and new network architectures, and facilitate the Internet of Everything (IoE). In the meantime, the vast accumulation of big data, coupled with artificial intelligence, plays a role of intelligent decision-making.

Figure: Four Development Stages of the Global Trade

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Traditional era</td>
<td>- Division of production and consumption among various countries - Involves the trade of final products</td>
</tr>
<tr>
<td>2.0 Era of global value chains</td>
<td>- Division of production processes among various countries - Involves the trade of intermediate goods and services</td>
</tr>
<tr>
<td>3.0 Era of digitalization</td>
<td>- Emergence of digital trade (digitalization of trade methods and objects)</td>
</tr>
<tr>
<td>4.0 Era of intelligence</td>
<td>- Data factors play a prominent role - Digital infrastructure such as 5G facilitates the Internet of Everything (IoE) - Big data, combined with artificial intelligence, plays a role of intelligent decision-making</td>
</tr>
</tbody>
</table>

Source: OECD and Deloitte

1.2 The Asia Pacific region seizes opportunities to develop digital trade
COVID-19, the development of digital technologies and enhanced regional cooperation are accelerating the formation of digital trade in the Asia Pacific region. Digital trade in this region is presented with brand new development opportunities as the supply and consumption sides accelerate online deployment, with digital infrastructure like platforms and payments under continuous improvement, and as regional policies promote trade facilitation and strengthen technological cooperation.

Figure: Development Opportunities for Digital Trade in the Asia Pacific Region

- Increased in value-added trade after COVID-19
- 84% increase in investment in foreign trade after COVID-19
- Improved communication conditions
- The popularity of smartphones and the enhancement of logistics
- The e-commerce market in the Asia Pacific region has witnessed rapid development in recent years.

The COVID-19 situation in 2020 accelerated the formation of digitalized behavioral habits of consumers, and online consumers have seen an accelerated expansion in both quantity scale and utilization market. Social distancing during the pandemic has added a large number of customers to apps covering e-commerce, social media and life services, and a great deal of consumption based on digital channels has led to the explosive growth of the "homebound economy" during the pandemic.

Figure: Survey of Digital Transformation of Foreign Trade SMEs
I. Ecology of digital trade in the Asia Pacific region emerges

Figure: COVID-19 Catalyzes Digital Behavior among Consumers

Since the outbreak of COVID-19...

<table>
<thead>
<tr>
<th>Activity</th>
<th>Before COVID-19</th>
<th>During COVID-19</th>
<th>Increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have tended to shop online more than before</td>
<td>25%</td>
<td>27%</td>
<td>8%</td>
</tr>
<tr>
<td>I have spent a lot of time watching digital entertainment content</td>
<td>23%</td>
<td>36%</td>
<td>53%</td>
</tr>
<tr>
<td>I have spent more time browsing online</td>
<td>15%</td>
<td>36%</td>
<td>140%</td>
</tr>
</tbody>
</table>

Rapid spread of digital payments: Digital payments, a tool for the digital consumption industry, have spread rapidly during the pandemic based on the expansion of online consumption and the convenience it provides. Shopping online, paying for utilities and ordering take-out have all become the application scenarios of digital payments. In addition to payments, digital payment platforms also provide other functions such as entertainment and life services through constant innovation. As of the first half of 2021, AliPay Wallet had 850 million active users, one fifth more than the 700 million at the beginning of 2020. In India and Indonesia, nearly 50 million users got an update on real-time information and pandemic dynamics via e-wallet. Such shift has accumulated a user base for countries in the exploratory stage of digital payments, thus providing good conditions for the development of digital trade.

Consumption via cross-border e-commerce is booming: As the pandemic prevention and control enters the normalization stage, consumers pay more attention to health and safety, and tend to meet their strong consumer demand through e-commerce channels. The wide variety of options, products with high performance-price ratio and the simple shopping processes of e-commerce have intensified consumers’ online shopping preference. In addition, as the prospects for the liberalization of cross-border travel do not look optimistic in the short term, global shopping of higher quality is expected to become a new consumption lifestyle model.

Digital entertainment ushers in growth: The pandemic has boosted people’s demand for online entertainment, such as binge-watching, online gaming and social media. The penetration rate of online entertainment and social scenarios has increased and the two are closely integrated. As the consumers’ habit of payments for digital products is gradually established and consumption preferences become mature and diverse, demand for digital goods will be more diversified. The cross-border trade of digital goods is expected to usher in growth opportunities.

Life service scenarios are unlocked: Due to the pandemic, restaurants, fruit and vegetable supermarkets, leisure and entertainment and other businesses that originally focused on offline consumption and operation have turned to online sales channels, and takeaway delivery services have seen rapid development. The traffic obtaining, radiation of digital platforms and the creation of consumption scenarios will enable more consumers to complete the consumption behavior of life service products, and online consumption of life services will become a considerable area of growth. After the pandemic ends, cross-border population flows will gradually return to normal, and offline cross-border retail and services are expected to bounce back. In terms of the payment tools, efficient and convenient mobile payments will become the mainstream as an important force to boost the life of digital consumption. In the post-pandemic era, consumer confidence will gradually rise again along with the economic recovery, and it will be difficult to reverse the digitalized habits that have already been established. These factors will bring opportunities to the booming development of digital consumption-related fields.

1.2.3 Continued improvements to digital infrastructure

(1) The Asia Pacific region has become one of the major players in the global digital platform. Countries and regions in Asia are improving digital infrastructure (such as AI, big data and cloud and blockchain) and enhancing connectivity and popularity through policies and reforms so as to reap the benefits of the digitalized economy. Riding the wave of the digital economy, cross-border digital trade has ushered in significant development opportunities. However, no matter how technology iterates, the essence of commerce will not change, namely meeting consumer demand and improving the efficiency of supply chains. In terms of meeting consumer demand, digital platforms and their technology tools for trade will provide new growth opportunities for Asian SMEs and drive the sustainable post-pandemic economic recovery in the Asia Pacific region. As trade is increasingly dependent on digital platforms and tools, traditional forms of foreign trade can no longer meet the needs of cross-border trade, and cross-border e-commerce platforms also play a role in cross-border digital trade. Digital platforms connect buyers and sellers directly, reducing the cost of searching and coordinating. Such platforms, with greater room for growth, have created seamless global markets in e-commerce, payments, travel, study and labor services. With data, search engines and algorithms, these digital platforms can reduce the cost of acquiring and applying information, bypass intermediaries, reduce trade barriers, and use idle assets to lower production and distribution costs. With the rise of digital platforms, new business models emerge one after another, bringing huge economic opportunities.
I. Ecology of digital trade in the Asia Pacific region emerges

Technology-empowered Digital Trade in Asia Pacific

Cross-border payments have gone through three development stages from local to global. From basic payment channel services to online trading platform for cross-border trade, it is now stepping into the stage of commercial operating systems featuring one-stop comprehensive solutions for cross-border trade.

Stage 1.0
- This stage is mainly dominated by foreign cross-border payment enterprises, which charge high payment service fees and the absence of other options for sellers.

Stage 2.0
- With the rise of domestic cross-border payment enterprises, transaction rates are gradually lowered, and the establishment of payment licenses gradually sets industry standards.

Stage 3.0
- Domestic cross-border payments enter an era when many enterprises contend. The major means of competition no longer lies in the transaction rate, which is replaced by differentiated value-added services and one-stop solutions for cross-border trade. The businesses that can really enhance industry efficiency and better meet the integrated demand of cross-border sellers can seize the initiative in future competition.

Figure: Development Course of Cross-border Payment Platforms

Online economy develops from local to global

3.0 Comprehensive solutions for cross-border trade
- Domestic cross-border payment enters an era where many enterprises contend and more value-based services on offer
  - Rates are further lowered to 0.5-0.7%
  - Enterprises focus on brand building and provide differentiated value-added services
  - Entering the value chain of sellers makes cross-border trade more efficient and simpler

One-stop comprehensive solution is the core means of competition to build digital trade. The new track of cross-border payments for digital trade integrates many new value-added services, such as translation, customs clearance, currency exchange, duty refunds, logistics, merchant reviews, financing and other supply chain services for international trade. Increasing innovations and advanced transformations place participants on an integrated platform where they may get everything they want. One-stop comprehensive solutions will drive the growth of the global cross-border payment trade market.
However, on July 1, 2021, the EU VAT mark-on-the-same day), (3) full-payment, and (4) bulk payment. The commitment to a “gradual shift to zero tariff” is expected to enhance the competitiveness of export commodities by reducing the cost of taxes and fees, thereby bringing benefits to cross-border e-commerce within the RCEP region.

(2) Establishing flexible rules of origin

Qualification around the origin of goods is the basis for preferential RCEP treatment, which ensures relatively free and flexible arrangements for the rules of origin. Enterprises can choose between regional value content or change in production, and all non-originating materials are exempted from the regulation of industrial chain to be more refined. The preferential barriers allow multinational companies to be more flexible in the decision-making of industrial layout, thereby enabling the existing system around the division of labor on the industrial chain to be more refined.

Regional Value Content (RVC) refers to that in case a party produces goods with non-originating materials, the goods can only be qualified as originating when they meet the requirement that the RVC is no less than 40%. Closely linked to the RVC is the “cumulation rule”, which is also the most unique aspect around the rules of origin in the RCEP. The so-called cumulation rule means that RCEP treats the originating materials of other parties used in the production of the products as the originating materials of the party where the production takes place, and that the products’ RVC can be accumulated in the region of the 15 member states. Exporters can enjoy preferential policies within the region as they will more easily meet the RVC40 ratio requirement or other material transformation requirements through the cumulation rule. The lowered regional preferential barriers allow multinational companies to be more flexible in the decision-making of industrial layout, thereby enabling the existing system around the division of labor on the industrial chain to be more refined. The reduction of production costs brought about by flexible rules of origin will not only facilitate trade within the RCEP region, but also promote deeper integration of regional supply chains and value chains.

Change in tariff classification (CTC) refers to that after one party processes the raw materials of other parties, goods and raw materials are categorized with different codes in the HS classification, including Change in Chapter (2 Digits), Change in Tariff Heading (4 Digits) and Change in Sub-headings (6 Digits). The CTC applies only to non-originating materials, and all non-originating materials are required to undergo the CTC.

(3) Promoting e-commerce

At present, no sound or mature set of rules for global e-commerce have been established. On the one hand, with the increasingly obvious strategic competition in digital trade, many economies are pursuing differentiated digital trade policies, while developing countries are in a defensive position in digital trade policies and rules for cross-border data flow. For example, India, Indonesia and South Africa are opposed to global e-commerce negotiations and refuse to sign the Osaka Declaration on the Digital Economy, and India also advocates for localizing data storage. On the other hand, the formulation of digital trade rules worldwide lags behind development practices. At the multilateral level, the WTO has not introduced special rules on the digital trade, and relevant rules take the form of scattered content in agreements and texts and annexes under the frameworks of the WTO, such as the General Agreement on Trade in Services (GATS), the Information Technology Agreement (ITA), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIP) and the Declaration on Global Electronic Commerce. Due to the lack of foreseeability in the development and reform of digital technology and the constrained efficiency of Doha Round negotiations, the above multilateral rules for digital trade are facing new challenges in terms of text design and operation.

It is the first time that the RCEP has included a dedicated chapter on e-commerce, which is the first comprehensive and high-level outcome of plurilateral e-commerce rules established in the Asia Pacific region. There are mainly three highlights as below.

Firstly, provisions related to paperless trading, ensuring the validity of electronic authentication and signature, and temporary exemption from customs duties, will be conducive to creating a more convenient online business environment. For digital trade, the international mutual authentication of digital identity, a basic condition for the establishment of digital factor markets, promotes the cross-border flow of digital technology. Meanwhile, thanks to the above provisions, the transaction link can be further developed online. It is expected that more scenarios like online displays and online negotiations, electronic payments and electronic signature will emerge, which will further broaden the channels of foreign trade and help companies secure more foreign trade orders.

However, on July 1, 2021, the EU VAT reform was formally implemented. The reform mainly focuses on removing the EU€22 VAT de minimis, unifying the registration threshold for the VAT payment of long-distance sales, expanding the application scope of “one-stop” compliance mechanisms, and clarifying the VAT payment obligations of e-commerce platforms affected by such reform, trade activities in EU will be weakened and those in the Asia Pacific region will be further boosted in the future.

1.2.4 RCEP promotes greater regional cooperation

On November 15, 2020, ten ASEAN member states, as well as China, Japan, South Korea, Australia and New Zealand, signed the Regional Comprehensive Economic Partnership (RCEP), marking the official launch of a free trade area (FTA) with the largest population, economic and trade scale in the world. According to the agreement text, the chapters on “Trade in Goods”, “Rules of Origin”, “Customs Procedures and Trade Facilitation”, “Electronic Commerce”, “Small and Medium-sized Enterprises” and “Economic and Technical Cooperation” indicate the direction for promoting regional digital trade. However, on January 1, 2021, the EU VAT
Secondly, provisions on online consumer protection, online personal information protection, regulation of unsolicited commercial electronic messages and cyber security protection are conducive to avoiding cyber hazards related to cross-border e-commerce. By introducing laws, RCEP is expected to achieve the coordinated protection of consumers’ rights and interests across borders, while also creating a favorable environment for e-commerce. Compared with domestic e-commerce, how to protect online consumers’ rights and interests is a particular pain point right now for the operation of cross-border e-commerce. The ruling powers are finally in the hands of overseas courts and arbitrators. Different interpretations of the provisions not only make it more difficult for consumers to safeguard their rights, but also affected the operational efficiency of cross-border e-commerce to a certain extent. For this reason, the provisions on consumers’ rights and interests in the chapter of Electronic Commerce mainly aim to protect the security of consumers’ information, make relief and recourse specific and transparent, and supervise cross-border e-commerce businesses. Thirdly, RCEP clearly supports the cross-border e-commerce operations and so new formats of cross-border e-commerce such as independent merchants are guaranteed by international rules and regulations. After signing the treaty, RCEP rules on customs procedures and trade facilitation cover more comprehensive content with a higher degree of facilitation. These rules will enable the use of digital technology to reduce customs clearance time and improve the efficiency of cross-border trade. RCEP simplifies customs clearance procedures with the adoption of a range of efficient administration measures to facilitate customs procedures, such as advance rulings, pre-arrival processing and the use of information technology and the release of goods by express and perishable goods, among others, within six hours after arrival, when the case of the realization of a legitimate public policy objective and ‘the protection of essential security interests’ without conflict, no party shall claim the right to monitor the employing facilities of a party involved as a condition for conducting business with it. The party involved from transferring information across borders by electronic means to conduct business. The aforementioned provisions will provide institutional guarantee for member states to strengthen e-commerce cooperation, facilitate the creation of a favorable environment for the development of e-commerce, and enhance mutual trust of policies, mutual recognition of regulations and mutual communication among enterprises in the field of e-commerce, thereby greatly advancing the development of e-commerce in the region. In the future, the integration of advantages of cross-border e-commerce and traditional manufacturing in the RCEP FTA may become the key for enterprises to reduce costs and increase efficiency, and the mutual promotion between online and offline operations will support the long-term coordinated development of enterprises.

(4) Enhancing trade facilitation
Compared with the Agreement on Trade Facilitation of the WTO and the relevant rules in the FTAs already signed by China, RCEP rules on customs procedures and trade facilitation cover more comprehensive content with a higher degree of facilitation. These rules will enable the use of digital technology to reduce customs clearance time and improve the efficiency of cross-border trade. RCEP simplifies customs clearance procedures with the adoption of a range of efficient administration measures to facilitate customs procedures, such as advance rulings, pre-arrival processing and the use of information technology and the release of goods by express and perishable goods, among others, within six hours after arrival, when the case of the realization of a legitimate public policy objective and ‘the protection of essential security interests’ without conflict, no party shall claim the right to monitor the employing facilities of a party involved as a condition for conducting business with it. The party involved from transferring information across borders by electronic means to conduct business. The aforementioned provisions will provide institutional guarantee for member states to strengthen e-commerce cooperation, facilitate the creation of a favorable environment for the development of e-commerce, and enhance mutual trust of policies, mutual recognition of regulations and mutual communication among enterprises in the field of e-commerce, thereby greatly advancing the development of e-commerce in the region. In the future, the integration of advantages of cross-border e-commerce and traditional manufacturing in the RCEP FTA may become the key for enterprises to reduce costs and increase efficiency, and the mutual promotion between online and offline operations will support the long-term coordinated development of enterprises.

1.3 SMEs are the main drivers behind the transformation of digital trade
1.3.1 Asia Pacific mMNEs are rising rapidly
In traditional international trade, commodities, technologies, funds and other elements mainly flow among large businesses. However, digital technologies have resulted in a constant reduction of global trade barriers and barriers on the international division of labor, and global trade has presented the features of fragmentation and high frequency. Therefore, SMEs can extensively participate in global trade. With the help of cross-border e-commerce platforms, they can not only sell their products to broader markets, but also make cross-border purchases. With the help of digital platforms, entrepreneurs and small businesses have become mMNEs as they are engaged in cross-border e-commerce across global markets. They provide diversified “locally-made products” and “locally-provided services for global buyers. Asia Pacific mMNEs are rising rapidly. These businesses are typical small and medium-scale enterprises. Many of them are even start-ups with fewer than 100 employees. Compared to conventional foreign trade businesses, they are more adept at using digital platforms. Even though they are new players, they can rapidly complete the complicated deals that only large businesses could handle in the past, including products selection, purchasing, sales, logistics, customs clearance, collection of payments, settlement of exchange deals and duty refunds. Meanwhile, they have operated an average of 3.56 overseas outlets, which means most of the companies serve three or even more overseas markets. This group of businesses are mainly composed of small retailers, small wholesalers, and self-use purchasers. The Deloitte survey has also demonstrated the aforesaid conclusions that Asia Pacific e-commerce markets mainly consist of details.

Figure: Portrait of mMNEs

Description: Small businesses with fewer than 100 employees are more motivated to provide products and services in vertical market segments in view of their market positioning, so that digital trade can continuously align with market demands and maintain positive growth momentum. Digital trade mitigates some of the disadvantages of SMEs in terms of cost and risk resistance. In terms of costs, the digital marketing of platforms is characterized by strong pertinence and widespread range, so the customer acquisition cost of SMEs is reduced. Mature cross-border e-commerce platforms offer one-stop import and export services and other technical support to businesses, simplifying the restrictions of intermediate cost to SMEs. Scenario finance also provides flexible and efficient financial solutions for SMEs. According to Deloitte’s survey of nine Asia Pacific countries, cross-border e-commerce enterprises in this region are fully of expectations after RCEP takes effect, especially in terms of simplifying customs clearance procedures and improving efficiency. They also expect the reduction of tariff barriers and the lowering of barriers to entry for local businesses (refer to 4.9 of this report for details).

1.3.2 SMEs and digital trade complement and reinforce each other
The boom in digital trade would not be possible without the active exploration of SMEs on e-commerce platforms by virtue of their flexibility. The development decisions made by large businesses tend to have a wide range of implications and involve complex interests, while SMEs can quickly shift their business directions. Thanks to their flexible coping capacity, it is easy for SMEs to transform production lines and grasp the demand changes of short-term markets. In addition, SMEs are more motivated to provide products and services in vertical market segments in view of their market positioning, so that digital trade can continuously align with market demands and maintain positive growth momentum. Digital trade mitigates some of the disadvantages of SMEs in terms of cost and risk resistance. In terms of costs, the digital marketing of platforms is characterized by strong pertinence and widespread range, so the customer acquisition cost of SMEs is reduced. Mature cross-border e-commerce platforms offer one-stop import and export services and other technical support to businesses, simplifying the restrictions of intermediate cost to SMEs. Scenario finance also provides flexible and efficient financial solutions for SMEs. According to Deloitte’s survey of nine Asia Pacific countries, cross-border e-commerce enterprises in this region are fully of expectations after RCEP takes effect, especially in terms of simplifying customs clearance procedures and improving efficiency. They also expect the reduction of tariff barriers and the lowering of barriers to entry for local businesses (refer to 4.9 of this report for details).
I. Ecology of digital trade in the Asia Pacific region emerges

Technology-empowered Digital Trade in Asia Pacific

In recent years, the e-commerce sector has experienced significant growth across the Asia Pacific region. With the advent of digital technologies, the traditional boundaries between physical and online shopping have blurred, leading to a surge in cross-border e-commerce transactions. This growth is driven by a number of factors, including improvements in internet infrastructure, increased smartphone penetration, and advancements in logistics and payment systems.

1.4 Green and sustainable development is a key theme of digital trade

1.4.1 Green and sustainable development is an important goal of Asia Pacific economies

"Carbon neutrality" represents an important phase requirement in the 2030 Agenda for Sustainable Development of the United Nations. Asian Pacific economies have clear emission reduction targets. China, for example, aims to peak its carbon emissions before 2030 and achieve carbon neutrality around 2060. Japan, South Korea, and New Zealand also have ambitious targets to reduce their environmental impact. Singapore, on the other hand, has committed to achieving carbon neutrality by 2050.

1.4.2 Consumption of green products is increasingly booming

On the one hand, the understanding of green consumption among consumers continues to rise. According to a Deloitte survey in 2021, 37% of millennials and 40% of Gen Z believe that more people will be committed to addressing environmental and climate issues after the epidemic and are ready to take actions such as improving recycling, encouraging the use of public transport, and changing eating and shopping habits. Both millennials and Gen Z also insist on choosing a pattern of consumption that matches their value, and more than a quarter of millennials and Gen Z express that the impact (positive or negative) of businesses on the environment will affect their purchase decisions.

On the other hand, the income level of consumers in the Asia Pacific region has continuously improved in recent years. Stronger purchasing power makes them willing to pay more premiums for green and environmentally-friendly products or packaging. Green shopping has also gained in popularity. Against that backdrop, enterprises have keenly captured the growing green consumption preference on the markets to offer more environmentally-friendly products to a wider range of consumers via cross-border e-commerce platforms.

1.4.3 Green development of e-commerce companies is constantly appreciated

The e-commerce industry is actively exploring the formation of a resource-saving and environmentally-friendly development model. Take China, the largest market in the world, as an example. At the policy level, the Chinese government guides enterprises to advance the green supply chain management of express packaging through direct collection of goods from place of origin, direct delivery with the original package, direct delivery of accumulated orders, recyclable applications, among other models. China also encourages enterprises to make use of cloud computing, big data, artificial intelligence and other technologies to strengthen supply and demand matching, increase stock turnover, promote logistics sharing among multiple channels, and reduce logistics costs and energy consumption. In China, leading e-commerce platform enterprises actively attempt to build green supply chains. For example, Alibaba Group has made various efforts to reduce emissions, such as optimizing algorithms, increasing the use of clean energy sources, and reducing carbon emissions in the logistics link. In 2021, Alibaba has proposed “green GMV” for the first time, and disclosed its carbon emission reductions of online orders.

It is expected that more e-commerce enterprises will actively improve the greening of products in terms of packaging, logistics, warehousing, and other aspects in a bid to reduce the environmental impact of the full life cycle of online shopping behaviors.

II. Comparing the development of digital trade markets in the Asia Pacific region

Technology-empowered Digital Trade in Asia Pacific

2.1 Evaluation system for the development of digital trade in the Asia Pacific region

This chapter analyzes and compares the development levels of digital trade in major Asian economies from two dimensions, namely cross-border e-commerce (60%) and digitalization (40%). Specifically, the development level of cross-border e-commerce is quantified by five indicators: e-commerce market size, compound growth rate of e-commerce market size, penetration rate of e-commerce users, consumption scale of cross-border e-commerce, and the proportion of cross-border e-commerce in overall e-commerce. Digitalization is measured by four indicators: internet penetration rate, network rate, revenue from network infrastructure, and per capita volume of transaction on e-payment platforms.

The primary data of all indicators are converted to fractional values from 0 to 100 first before comparing the scores of each country. The combined scores of each country will be obtained according to the weight of the two dimensions. The countries will be grouped based on their rankings. The higher a country’s score, the better its performance in digital trade.

2.2 Development of digital trade in the Asia Pacific region and market grouping

In light of the above-mentioned evaluation system, major Asian economies can be mainly divided into mature markets, developing markets and early-stage markets in terms of their development level of digital trade.

Among them, mature markets mainly include China, South Korea, Singapore and Japan; developing markets include Thailand, Malaysia, Indonesia, Vietnam and the Philippines; and early-stage markets include Myanmar, Cambodia, Laos and Brunei.
II. Comparing the development of digital trade markets in the Asia Pacific region

Technology-empowered Digital Trade in Asia Pacific

Figure: Overall Score among Major Asian Economies in Terms of Development of Digital Trade

<table>
<thead>
<tr>
<th>Mature markets</th>
<th>Developing markets</th>
<th>Early-stage markets</th>
</tr>
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<tbody>
<tr>
<td>China</td>
<td>South Korea</td>
<td>Singapore</td>
</tr>
<tr>
<td>71.4</td>
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<td>65.6</td>
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<table>
<thead>
<tr>
<th>China</th>
<th>South Korea</th>
<th>Singapore</th>
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<tbody>
<tr>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: The dots only represent the cross-border e-commerce of such countries for the moment. The dots only represent the positions of such countries in the coordinate system.

Figure: Comparison of Three Types of Markets in Terms of Development of Cross-border E-commerce and Digitalization

- Mature markets
  - In terms of the development of cross-border e-commerce, China especially boasts outstanding advantages due to its huge e-commerce scale. In spite of its small overall market size, cross-border e-commerce accounts for a relatively high proportion of Singapore's overall e-commerce, while e-commerce markets in Japan and South Korea tend to be more mature, but the proportion of cross-border e-commerce in overall e-commerce is quite low. In the future, along with the greater openness of e-commerce, strong purchasing power of citizens and a solid e-commerce supply chain foundation will effectively promote the continuous growth of digital trade.
  - Mature markets lead in their levels of digitalization. Due to high internet penetration rates in South Korea, China, Japan and Singapore, the advanced informationalized level has laid a solid foundation for the development of e-commerce. Well-grounded internet infrastructure and rapid network speed have also provided unimpeded and efficient facilities and platforms for digital trade. Furthermore, e-payment has been widely applied, and this mode of payment, as the core part of online trade, has directly improved the security and convenience of digital trade.

- Developing markets
  - The e-commerce industry of the five developing markets hasn't exhibited any shortcomings in scale and growth. In particular, the e-commerce markets of Malaysia and the Philippines are expected to register the fastest growth in the region, and the penetration rate of cross-border e-commerce in Thailand is relatively high. In light of their limited levels of digitalization and domestic e-commerce scale, the maturity of the five cross-border e-commerce markets is respectable. Going forward, a sound e-commerce foundation in developing markets will unlock considerable consumption potential for regional digital trade under RCEP.
  - Developing markets generally have a certain foundation in digitalization, but their degree of development is limited. Although the five countries possessed certain internet infrastructure and user base, there is still some room for improvement in network rate. The quality improvement of internet infrastructure will raise the efficiency of information exchanges, and unleash the vitality of e-commerce platforms. Nonetheless, an enormous gap remains between developing markets and mature markets in the application of e-payment, which has restricted the development of digital trade. In the future, the collaboration and mutual assistance at the technological level under RCEP are expected to substantially enhance digitalization in developing markets.

- Early-stage markets
  - Cross-border e-commerce in early-stage markets underperforms the regional average level in the assessment. The size of the four e-commerce markets is underdeveloped, but the e-commerce industry of Myanmar and Laos is expected to enjoy double-digit growth in the future. Given imperfect hardware conditions for the development of cross-border e-commerce business, such as transportation and logistics conditions, there is still some way to go for early-stage markets to build a sound cross-border e-commerce industry. Early-stage markets have a relatively low overall level of digitalization, and generally have no sophisticated infrastructure and platforms in place for the development of the digital industry (but Brunei takes the lead in internet penetration rate in Asia). In addition, their per capita e-payment transaction scale is extremely small, and their online payment environment is less developed.
III. Analysis of key countries in the Asia Pacific market

3.1 Singapore, as an international financial and maritime center, connects Southeast Asia

Being a highly internationalized financial and maritime center renders Singapore important in Asia and in the world. Despite its small geographical area, Singapore still serves as Southeast Asia’s financial center, international intermediary trade station and aviation hub. Singapore is not only the largest foreign exchange market in the Asia Pacific region, but also the third largest in the world. With more than 200 banks, it is the fourth largest international financial center in the world. Singapore is the fourth most competitive city of the world by the World Economic Forum. Singapore’s powerful economy should not be neglected, as it is home to the Asian headquarters of many Fortune Global 500 companies. The logistics industry of Singapore has always performed strongly. Singapore’s logistics performance index (LPI) among the global top ten and the country has convenient services in highway, railway, maritime transport, and air transport. As an island state covering a national territorial area of 641 square kilometers, Singapore has become the largest transshipment center in the world by establishing a booming marine ecosystem. 20 of the world’s top 25 large logistics companies have set up their regional/global headquarters in Singapore, and Singapore also boasts world-class logistics infrastructure with global connectivity. Thus attracting a large number of manufacturers and unicorn companies to set up operation bases there.

The Singaporean government actively promotes global digital trade. Singapore established rules on digital trade and economic cooperation on digital trade with multiple countries with the release of the Digital Economy Agreement (DEA) as it seeks to establish a digital trade framework in Asia and even the whole world. The digital trade cooperation framework built on the DEA enables Singaporean companies to connect with their overseas partners in digital trade more seamlessly, thus ultimately cutting down operational cost, increasing business processing efficiency, and making it easier for them to get access to overseas markets. At the same time, Singapore gives top priority to six aspects in the development of the DEA, namely artificial intelligence, Cross-Border Privacy Rules (CBPRs) of APEC, data innovation, Data Protection Trustmark (DPTM) certification, national electronic invoicing network, and digital transformation of SMEs, as a way to actively push forward the transformation of domestic companies. Currently, Singapore has signed relevant digital trade deals with many countries, including Chile, New Zealand, Australia, South Korea and the UK.

Singapore serves as the hub for headquarters for cross-border e-commerce platforms in Southeast Asia. Thanks to the forward-looking planning and deployment by the government in digital economy ecology, Singapore has evolved into a highly developed internet market. Blessed with numerous advantages, Singapore is a popular destination for the e-commerce industry. Lots of unicorn companies in Southeast Asia have set up their headquarters in Singapore, including the cross-border platforms Shopee and Lazada, two giants in the e-commerce industry. In addition, the integrated e-commerce platforms headquartered in Singapore also include: Qoo10 (a local brand), Amazon Singapore, Ebay and Carousell; the vertical e-commerce platforms include: Zalora (fashion), Sephora Singapore (beauty makeup), HipVan (home decoration), Redmart (fresh food), Shopback (group purchase) and Pupuk (infant and mother).

It is predicted that the e-commerce market size of Singapore will double in 2025 compared with 2020, with its gross merchandise volume (GMV) amounting to US$8 billion.

3.2 China’s platform-based development drives cross-border trade

China’s developed levels of digitization lays a solid foundation for the high-speed development of e-commerce trade. As the world’s second largest digital economy just behind the US, China has seen digital economy turning into an important driver of economic growth. In 2020, the digital economy in China grew more than three times as fast as its GDP. In the same year, the General Administration of Customs of China issued the Announcement on Expanding the Scope of the Pilot Program of Supervision over Business-to-Business Export in Cross-Border E-commerce, further promoting the large-scale development of B2B cross-border e-commerce, and effectively filling the demand gap of overseas markets. Meanwhile, given the steady increase of investments in cloud platforms and the ever-accelerating construction of digital platform infrastructure in 2016-2021, enterprises have strengthened penetration in cross-border service ecosystem, and built digital trade platforms based on ecological matching of supply and demand resources, in an effort to support the ever-expanding cross-border B2B market.

Meanwhile, China leads the world in the development of 5G, and the high-quality network construction builds an efficient and convenient communication bridge for e-commerce users. Moreover, China’s e-payment system has seen rapid development. In 2020, China registered US$424.59 trillion and US$2,086 in the amount of e-payment respectively. Cross-border e-commerce has entered a mature stage with huge development potential. The market size of cross-border e-commerce in China has reached US$1,542.5 billion, surpassing all the RCEP member states.

- B2B e-commerce for cross-border trade takes a dominant position in China. In 2020, the B2B market for cross-border e-commerce in China accounted for about 72.8% of the entire cross-border e-commerce market. Specifically, cross-border imports occupied 28.9% and cross-border exports occupied about 71.1%, with the US, Japan and Vietnam as its top three export markets. It is
expected that the cross-border B2B market size of China will grow to US$2.2 trillion with a compound annual growth rate of 25%.

- North America and Europe are the largest export destinations for Chinese cross-border e-commerce, North America and Europe together account for 62.5% of China's cross-border exports, while Japan and South Korea combined account for 27.9%, and Southeast Asia accounting for 34.1%, which have become a new growth pole for China's cross-border export. However, the proportion of China's export to Africa, Latin America and Middle East is less than 20%, so there is still much more room for growth in the future.

- Under the shadow of COVID-19, Chinese cross-border B2C e-commerce defies adverse trends. Impacted by the pandemic, the traditional B2B market is gloomy. In order to fill the consumption gap, cross-border B2C e-commerce goes against this adverse trend. As China possesses the most complete manufacturing industrial chains in the world and overseas markets are highly dependent on Chinese products, B2C cross-border e-commerce unleashes tremendous development potential. According to the data from the General Administration of Customs of China, the import and export volume of cross-border e-commerce retail in China stood at US$2.72 billion from January to February 2020, representing an increase of 36.7% year on year, and the total import and export volume of cross-border e-commerce in Q1 2020 increased by 34.1% year on year.

- Geographically, cross-border e-commerce sellers in China’s exports are mainly concentrated in the Yangtze River Delta and the Pearl River Delta. Guangdong Province, Zhejiang Province and Jiangsu Province have the most cross-border e-commerce sellers, each accounting for 10% of sellers across the country. In the future, the development potential of cross-border e-commerce in the central and western regions will be gradually unleashed, where the size of seller groups will keep growing.

### 3.3 South Korea strategically turbocharges its cross-border e-commerce

South Korea is world-leading in terms of infrastructure digitization and boasts excellent conditions for e-commerce. South Korea takes a leading position in digitalization among RCEP member states with the highest internet penetration rate (96.16%) in the region. Efficient and sophisticated digital infrastructure in South Korea can be mainly attributed to the support of the government for digitalization construction. The South Korean government has taken the lead in the transformation of digital government, and upgrades in the construction of a superior network has been a national strategy. It remains devoted to a ten-year national broadband construction from 1995, making use of powerful digital technologies to build government platforms for the public, and publicizing the practices to the whole country. At present, broadband internet rates, both at the mobile terminal and the fixed terminal in South Korea, have touched the world’s leading level. In the meantime, in order to continue to maintain its leading position, South Korea invested 9.5 billion to facilitate the commercialization of 5G mobile communication in 2020. The perfect internet environment enables the development of e-payments. According to Statista's projections, South Korea will record US$143.9 billion and US$2.784 in total volume of transactions via digital payments and in per capita volume of transactions via e-payment respectively in 2021. Its total transaction value is also expected to grow at a rate of 8.71% between 2021 and 2025. The sophisticated infrastructure has provided excellent conditions for the development of digital trade in South Korea. South Korea promotes the development of cross-border e-commerce industry from the perspective of national strategy. In the development of cross-border e-commerce, the South Korean government actively participates in the discussions on e-commerce among multilateral organizations (such as OECD, APEC and ASEAN), and reinforces cooperation with the countries where the e-commerce industry is prosperous (such as the US, China, the UK, Germany and Singapore). The South Korean government also launched the eMIP plan, which aims to connect overseas businesses and build a global business network by using e-commerce infrastructure and mature business models, thus making South Korea the network center for cross-border trade among Asian countries. Exporting electronic trading systems and electronic trading solutions to overseas markets is one of the important outcomes in the development of cross-border e-commerce.

### 3.4 Japan’s strong logistics technologies underpin the cross-border trade

Although Japan’s digital economy infrastructure is complete, the development of its e-payment industry lags behind other countries. Thanks to a series of strategies established in the early stage such as the Strategy of Constructing Nation via IT, Japan actively promotes the construction of domestic information infrastructure and the development of the digital economy. In 2021, the internet penetration rate of Japan reached 93.9%, and the cost effectiveness of its early infrastructure construction has reached US$10.1 billion, ranking just behind China. The high cost effectiveness of its network construction improves the competitiveness of Japan’s e-commerce market. However, its internet quality has gradually become backward as the infrastructure was constructed a long time ago, and it ranks last among mature markets in terms of internet speed. Meanwhile, as Japan has a severe aging problem and its senior citizens prefer physical capital, its e-payment industry has developed slowly. In 2021, it is expected that e-wallets as a mode of payment only make up 7% of market share, and that its per capita volume of transactions via e-payment (US$1,773) is lower than that of other mature markets. Cross-border e-commerce in Japan is still not open enough. That most Japanese consumers are not proficient in a second language has led to a language barrier for cross-border e-commerce. The interface with third-party platforms also renders consumers less willing to make cross-border purchases. As a result, the consumption scale of cross-border e-commerce in Japan fails to develop smoothly.

Cutting-edge logistics technologies in Japan provide strong support for cross-border electronic trade. In addition to advanced information technology and other infrastructure in the early stages, Japan also relies on its effective management of cross-border logistics, and its efficient logistics information systems provide strong support for digital trade inside and outside of Japan. Logistics costs in Japan only occupied 5.38% of its sales volume in 2020. Japan is committed to building a zero-carbon society to promote the green development of its economy. Recently, the Ministry of Economy, Trade and Industry of Japan released the Green Growth Strategy, setting a target to achieve carbon neutrality by 2050 and building a zero-carbon society. Japan adheres to the development of green industries to drive the continuous progress of the economy. As a mature market, Japan encourages the development of offshore wind power, hydrogen fuel, hydrogen energy, and other efficient green industries, as well as the utilization of carbon recovery and other technologies to reduce carbon emissions. At present, Japan has great ascendancy in advancing green digital trade as its carbon dioxide emissions per unit of GDP are only 0.18g, much lower than that of other RCEP member states. Meanwhile, Japan formulates and responds to environmental protection standards in trade based on strict principles, and takes part in the signing of multiple environmental protection agreements such as the ozone layer protection so as to actively boost the green economy in regional trade.
3.5 Malaysia’s continuous digitalization penetration drives growth in cross-border trade

The e-commerce market in Malaysia witnesses the fastest growth but the scale of cross-border consumption requires further improvement. The e-commerce market in Malaysia has developed rapidly over recent years. In 2021, the total size of the e-commerce market in Malaysia achieved 61.4% of the e-commerce market size in China, totaling US$6.297 billion and ranking third among developing markets only after Indonesia and Thailand. The compound growth rate of its e-commerce market size is expected to reach up to 14.84% between 2021 and 202525, ranking first among RCEP member states. This indicates that the e-commerce market in Malaysia has remarkable development prospects. However, the current penetration rate of online e-commerce is relatively low in Malaysia, reaching 44% in 202121, and the increase in penetration rate has stabilized at around 4% in recent years. Along with improvements to internet infrastructure and the increase in penetration rate of network users, e-commerce users are expected to increase accordingly. Nevertheless, under the impact of many factors, including cross-border logistics infrastructure and technical operations, Malaysia’s cross-border consumption scale is not optimistic, only reaching US$3.52 billion21. This only accounts for 42% of the market size of the internet economy in Malaysia21, which is much lower than that of mature markets among RCEP members.

The concept of green development promotes sustainable development. The Malaysian government actively advances ESG concepts, supports green and sustainable development, and advocates the utilization of efficient energy to stimulate the development of renewable energy. In addition, the government has issued multiple bills including the National Energy

3.6 Indonesia’s demographic dividend keeps unleashing market potential

The scale of e-commerce in Indonesia is huge with tremendous potential in cross-border e-commerce. The total size of Indonesia’s e-commerce market reached US$43.351 billion in 2021 compared with the e-commerce market size in China, ranking just behind South Korea as the third largest in RCEP. The compound growth rate of e-commerce market size is expected to register 10.2% between 2021 and 2025, so the e-commerce market in Indonesia is considered to have tremendous potential. Meanwhile, the proportion of cross-border e-commerce consumption scale in Indonesia is at a relatively high level among developing markets. The consumption scale of cross-border e-commerce in Indonesia stands at US$17.34 billion, ranking just behind China—the mature market—among RCEP member states. Cross-border e-commerce is expected to become an important part of Indonesia’s economy.

- Social e-commerce is thriving and consumers are fond of trading on social media. The social media landscape in Indonesia is flourishing, and some enterprises have attained great success on Facebook and Instagram. Indonesian consumers are accustomed to dealing with sellers directly through social media or messaging apps (such as LINE and WhatsApp). They are generally indifferent to trading platforms, and so they prefer to search for goods on social media, which is more user-friendly and reliable.
- Indonesian consumers like buying expensive products and the average transaction value is low. Indonesian consumers prefer to buy promotion- and low-priced products. After the end of a seller’s promotion campaign, consumers would proactively search for discounts from other sellers. In order to enhance consumer loyalty, sellers are required to set competitive prices while delivering excellent shopping experiences and promotional campaigns. According to a survey of iPrice, the average transaction value of Indonesian online shoppers is US$36, much lower than that of Malaysia (US$54) and Singapore (US$91).
- Logistics represents the most daunting challenge faced by Indonesian cross-border e-commerce. Indonesia is home to 17,000 islands covering an area larger than the EU, and logistics costs account for about a quarter of Indonesia’s GDP. However, e-commerce retailers are trying to surmount the difficulties faster than expected amid increasing adoption of smartphones.
- Users prefer e-commerce platforms in local language. Language experience will greatly affect consumer shopping experience, and Indonesian consumers on the whole network express that they would rather see local languages or native languages on the interface of e-commerce shopping platforms.
3.7 E-payment rate in the Philippines constrains online trade

E-commerce in the Philippines has huge growth potential, but the e-payment industry is poorly developed. The Philippines is a country of thousands of islands, therefore its unfavorable geographical conditions makes it extremely difficult to build the internet, which further leads to sluggish development of internet construction in the country. Network users only account for 67% of its total population. The complicated geographical pattern has a significant negative impact on the network penetration rate and network speed in the Philippines.

The e-commerce market in the Philippines is in an initial stage of rapid development. Although the current e-commerce market size only amounts to US$5.089 billion, its compound growth rate is expected to reach up to 14.64% between 2021 and 2025, ranking just behind Malaysia among RCEP members. The e-commerce market in the Philippines has enormous potential, so the country has become a hot spot for quite a few international investments.

However, impacted by the internet, e-wallet and other digital technologies, the penetration rate of e-commerce users is not high, only accounting for 39% of the total population. Despite the fact that digital payments present an uptrend due to the pandemic and relevant national policies, the penetration rate of e-payments is not high in the Philippines on the whole. The per capita volume of transactions via e-payment in 2021 is only US$13927. Generally speaking, Filipinos rarely use bank accounts, they are accustomed to using cash in transactions and they are worried about the security of e-payments, thereby leading to slow development of e-payment industry. At the same time, sluggish progress in digital infrastructure and other areas further impedes the e-commerce development of the Philippines.

Figure: Statistical Overview of the Number of Internet Users in Ten ASEAN Member States from 2020 to January 2021 (millions)

Figure: Per Capita Volume of Transactions via E-payment (US$)
IV. Ten findings of the cross-border e-commerce dynamics in the Asia Pacific region

In July 2021, Deloitte conducted a survey on cross-border e-commerce enterprises in multiple Asia Pacific nations, including China, Singapore, South Korea, Japan, Indonesia, Malaysia, the Philippines, Thailand and Vietnam, collecting 600 questionnaires and summarizing ten findings around the dynamics of cross-border e-commerce in the Asia Pacific region.

4.1 Small businesses account for more than 85% of cross-border e-commerce

The cross-border e-commerce market in the Asia Pacific region is mainly composed of small businesses with fewer than 100 employees (over 85%). In developing markets, large businesses only account for 5% of market size, slightly greater than the proportion of large businesses in mature markets (2%). The enterprises with income less than US$1 million account for 63.5% in developing markets, about 10 percentage points higher than that of mature markets (52%).

4.2 “Cross-border home-bound economy” comes into prominence with 3C electronic products emerging as an export mainstay

"Cross-border home-bound economy" comes into prominence with 3C electronic products emerging as an export mainstay. As the pandemic impedes normal life and social contact, the demand for online equipment has been surging, resulting in increased cross-border trade of 3C electronic products. From the perspective of sales of cross-border e-commerce enterprises in the Asia Pacific region, 3C products still rank among top three on the sales list of most countries. Specifically, the proportion of cross-border e-commerce in the 3C industry reached 52.6% in the Philippines. From the perspective of China’s sales data, 3C products no longer have a significant edge and businesses dealings in furniture and home supplies deal more than half of all business. Beauty makeup products are favored in South Korea, and beauty makeup sales account for 19.9% in the cross-border market. In addition, clothing and accessories products also occupy large market shares in cross border e-commerce in the Asia Pacific region. These kinds of products dominate nearly 50% of market shares in Indonesia.

4.3 Mature markets favor Europe and America, while developing markets focus on Southeast Asia

North America and Europe are the largest import and export destinations for cross-border e-commerce in mature markets in the Asia Pacific region, with Amazon and eBay being more popular. Furthermore, as an increasing number of businesses are eager to build brands and engage customers directly by virtue of mature market operations, self-built platforms are the perfect way to learn about users’ psychology and feedback and thus guide product R&D and operations. The e-commerce import and export destinations of developing markets are mainly concentrated in Southeast Asia. As a platform catering to the Southeast Asian market, Lazada serves as an important choice for enterprises to make overseas transactions and is deeply favored by Southeast Asian customers.
For mature cross-border e-commerce markets, Europe, America and Southeast Asia are the sales regions with rapid growth, while developing cross-border e-commerce markets mainly expand sales in the Asian market. The Southeast Asian market ranks among top three among all sales markets in Asia Pacific countries. Specifically, over 80% of cross-border e-commerce businesses in Indonesia, Malaysia, the Philippines and Vietnam believe that the Southeast Asian market has the fastest growth.

The main defects of third-party platforms lie in various expenses and fierce competition. Cross-border e-commerce in the Asia Pacific region mainly faces various expenses and fierce competition from third-party platforms. When a product or brand has less prominent advantages, it will be easily obscured by a great deal of product information or has to pay costly booth fees. Due to a lack of information sharing, the platforms will not share consumers’ data with sellers, so it is hard for sellers to improve repurchase rate. More than 25% of cross-border e-commerce enterprises express that sellers can barely enhance the depth of services due to the lack of independent and innovative marketing.
Technology-empowered Digital Trade in Asia Pacific

4.4 70% of enterprises hope to establish independent websites

Independent websites have become a key channel for enterprises to break the business ceiling or expand into new markets, as it attracts the attention of increasing export sellers. Compared with third-party platforms, cross-border e-commerce with independent websites has the advantages of precision and flexibility. 70% of the surveyed enterprises plan to set up independent websites. Cross-border e-commerce has entered the stage of three-dimensional channel deployment. According to the survey results, among cross-border e-commerce sellers in mature markets, 75% of cross-border e-commerce enterprises have launched or intend to launch independent websites, which is evidently higher than the proportion (69%) in developing markets.

4.5 Payment and sales are the most digitalized links

Payment and sales are the two major links with the highest penetration rate of digitalization. The penetration rate of payment digitalization in mature markets is 55%, and 53% for sales digitalization. Mature markets vigorously adopt digital technologies in terms of payments, sales and logistics, among which the digitalization rate of all links in Singapore is much higher than the average value. The digitalization degree of production and transaction is relatively high in developing markets. The least digitized part in all links lies in production. The digitalization of production in developing markets is slightly higher than that in mature markets with Vietnam and the Philippines performing very well. Cross-border e-commerce in developing markets performs better in trading, and Indonesia performs noticeably well with the penetration rate reaching 52.5%. The penetration rate of sales digitization in Malaysia is the highest, standing at 65.7%. The penetration rate of payment digitalization and logistics digitalization in Singapore are the highest, standing at 85.2% and 63%, respectively.

4.6 Various expenses, fierce competition, overlay and coverage of information, lack of independent and innovation marketing, and lack of information sharing are the major motivations for setting up independent websites.

In that case, independent websites present noticeable advantages.

- Shaping corporate brands and pinpointing customer traffic: sellers can continuously enhance brand strength through independent websites, and harvest new resources while maintaining regular customers with a view to repeat marketing and cross-selling in the future.
- Achieving data security and value increase: sellers can have 100% of data in their hands, control the security of data, and conduct the secondary development of data so as to constantly dig out the value of such data.
- Avoiding the restrictions of rules and reducing cost: self-operated independent websites provide high autonomy and flexibility, and have cost advantages with lower transaction commissions or annual fees than third-party platforms.

In developing markets, the penetration rate of payment digitalization is 51%, and 58% for sales digitalization. The digitalization of sales and logistics in developing markets is significantly higher than that in mature markets with Indonesia and the Philippines performing very well. Cross-border e-commerce in developing markets performs better in trading, and Indonesia performs noticeably well with the penetration rate reaching 52.5%. The penetration rate of sales digitization in Malaysia is the highest, standing at 65.7%. The penetration rate of payment digitalization and logistics digitalization in Singapore are the highest, standing at 85.2% and 63%, respectively.
4.6 Instant receipt of funds makes cross-border collection more efficient

In the aspect of e-payment platforms, WorldFirst has been widely applied in mature markets, occupying a share of above 40% in China, Japan and South Korea. Paypal has more advantages in developing markets where Southeast Asia predominates. Founded in London in 2004, WorldFirst is engaged in providing high-quality payment services for global SMEs. Since it joined Ant Group as a wholly-owned subsidiary in 2019, WorldFirst has continued to cooperate with qualified domestic institutions to provide faster, more convenient and affordable cross-border collection services for cross-border e-commerce sellers and SMEs.

Instant receipt of funds makes cross-border collection more efficient. The survey results show that the vast majority of enterprises hold that the rapid and efficient fund reconciliation process improves the timeliness of cash flow. Cash flow is vital to small multinational companies, providing timely fund reconciliation processes to improve the timeliness of cash flow. Enterprises pay attention to lower expenses and security guarantees. In the meantime, seamless connection to various global commercial platforms is one of the main advantages of online payment platforms. In terms of payment rate, currently the average rate of cross-border payment markets has declined to 0.6%-0.7% from 1%, and payment institutions are trying to grant more concessions to sellers. In the aspect of security, quite a few payment institutions provide sellers with a more comprehensive and guaranteed payment experience by obtaining licenses and adopting advanced technologies. In addition, considering that receipt speed of funds used to be a significant inconvenience for many sellers in the past, payment institutions take pertinent measures to provide the services about instant receipt of funds for sellers.

Generally speaking, payment institutions can address the pain points of cross-border sellers by improving payment systems, raising the timeliness of capital flows, realizing seamless connections to various global e-commerce platforms, and providing security guarantees.

4.7 High logistics costs are the biggest challenge to cross-border e-commerce

The stubbornly-high logistics costs in the cross-border e-commerce industry is the largest challenge for cross-border e-commerce enterprises. The second hardest challenge is the difficulty in customs clearance and inspections, and the third hardest challenge lies in low awareness of brands, high platform fees and marketing problems. Nearly a third of enterprises are facing these three types of challenges.
Although high logistics costs are almost the biggest challenge in cross-border e-commerce in the Asia Pacific region, 61.8% of the surveyed enterprises in Vietnam believe that the largest challenge is the difficulty in customs clearance inspections.

Table: Breakdown of Challenges to the Cross-border E-commerce of Various Countries

<table>
<thead>
<tr>
<th>Challenge</th>
<th>China</th>
<th>Singapore</th>
<th>South Korea</th>
<th>Japan</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Thailand</th>
<th>Vietnam</th>
</tr>
</thead>
<tbody>
<tr>
<td>High logistics costs</td>
<td>72.10%</td>
<td>74.10%</td>
<td>57.90%</td>
<td>75%</td>
<td>63.20%</td>
<td>77.80%</td>
<td>78.90%</td>
<td>65%</td>
<td>44.10%</td>
</tr>
<tr>
<td>Difficulty in customs clearance inspection</td>
<td>27.90%</td>
<td>37%</td>
<td>38.60%</td>
<td>55.60%</td>
<td>57.90%</td>
<td>58.60%</td>
<td>36.80%</td>
<td>40%</td>
<td>61.80%</td>
</tr>
<tr>
<td>Low awareness of brands</td>
<td>32.40%</td>
<td>37%</td>
<td>38.60%</td>
<td>11.10%</td>
<td>21.10%</td>
<td>33.30%</td>
<td>31.60%</td>
<td>35%</td>
<td>47.10%</td>
</tr>
<tr>
<td>High platform expenses</td>
<td>44.10%</td>
<td>37%</td>
<td>24.60%</td>
<td>38.90%</td>
<td>21.10%</td>
<td>42.40%</td>
<td>21.20%</td>
<td>25%</td>
<td>32.40%</td>
</tr>
<tr>
<td>Difficulty in marketing</td>
<td>44.10%</td>
<td>25.90%</td>
<td>47.40%</td>
<td>22.20%</td>
<td>26.30%</td>
<td>29.30%</td>
<td>10.50%</td>
<td>30%</td>
<td>44.10%</td>
</tr>
</tbody>
</table>

4.8 “Genuine goods guarantee” is vital to the sustainable development of supply chains in cross-border e-commerce

Cross-border e-commerce is mainly confronted with four challenges in the sustainable development of supply chains: “Genuine goods guarantee” is a crucial consideration factor for consumers when buying goods, but cross-border trade makes brand certification challenging. Almost half of cross-border e-commerce enterprises believe that genuine goods guarantee is an enormous challenge, and even more enterprises in developing markets and Singapore hold this view. The proportion of the surveyed enterprises holding that view in Singapore even reaches 74.1%. It is difficult for brands to contact downstream channels and they face high information collection cost and trust cost. 37.5% of enterprises are facing this challenge. Among them, 47.4% of enterprises in the Philippines and 16.7% of enterprises in Japan are wrestling with this issue.

Cross-border logistics has long delivery times, posing challenges to the quality control over the goods with high timeliness. Cross-border logistics also faces tariff differences and diverse complicated customs clearance formalities and procedures. 31% of enterprises are facing these two challenges, and developing markets are facing more severe challenges than mature ones. Additionally, 25% of cross-border e-commerce enterprises also note that overseas warehouses are faced with high cost in the case of using self-built warehouse logistics.

4.9 Simplification of customs clearance processes and tariff reductions are the main expectations after RCEP takes effect

Most Asia Pacific countries expect that RCEP gives top priority to simplifying customs clearance processes, reducing tariffs and strengthening supervision, while nearly 50% of businesses in the Philippines and Vietnam expect that RCEP can contribute to the integration of regional market resources.

4.10 Green development is turning from an objective into action

A majority of companies in the Asia Pacific attach great importance to green development goals. Among them, more than 60% of businesses in Vietnam focus on green development goals, taking the highest proportion. Businesses in Singapore have the strongest green action power, as this country leads other countries in the proportion of enterprises taking action for green development goals, achieving 29.6%.

Figure: Main Expectations after RCEP Takes Effect
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