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RCEP: Development of China-Japan-Korea Digital Economy and trade strategies of digital trade

Yuan ciqian[a*] **,Lizhe zhou**[b]

a. Fuzhou University of International Studies and Trade, Student, Fuzhou
b.Fuzhou University of International Studies and Trade, Ph.D. Economics, Fuzhou

Abstract: Currently, information technology innovation is advancing day by day; digital, intelligent networks are booming, and in terms of the current situation, China, Japan, and South Korea are still facing some problems to be solved in the development of digital trade, and digital technology can shine when meeting the relevant issues. Although predecessors have conducted numerous related studies on the development of digital trade among China, Japan, and the ROK, debates persist over how to address the new challenges facing these countries and overcome the difficulties in developing digital economic and trade exchanges. To this end, based on the development trend of China, Japan, and South Korea in the field of digital trade, according to the economic and trade characteristics of China, Japan, and South Korea under the "RCEP," this paper deeply analyzes the common problems faced by the three countries and predicts their development direction. Accelerating the development of digital trade benefits the comprehensive development of China, Japan, and the ROK and plays a massive role in promoting economic globalization. By accelerating the transformation and upgrading of digital technology, strengthening the collaboration between digital rules, and creating a new growth space; second, continuing to deepen the economic and trade cooperation between China, Japan, and South Korea, opening up new channels of economic and trade cooperation, and promoting new forms, models, and exchanges.
Keywords: China, Japan, and South Korea; digital economy and trade; opportunities and challenges.

1. Introduction:

In the context of global technological and industrial transformation, the digital economy has emerged as a vanguard force driving development. Catalyzed by the new round of global technological and industrial revolution, the rise of the digital economy has experienced unprecedented growth, having a profound impact on global economic patterns. Based on data provided by the United Nations Conference on Trade and Development (UNCTAD), Han Dongxue used the trade competitiveness index, explicit comparative advantage indices, and other comparative advantage measures to compare digital service trade in China, Japan, and South Korea. He found that China is more assertive than Japan overall, while South Korea leads in digital service trade (Han & Wang). However, in some areas, South Korea lagged far behind China and Japan. From an industry composition perspective, China has demonstrated strong competitiveness in business services and information and communication technology. Japan has significant advantages in intellectual property rights, and South Korea is unique in the cultural industry, boasting a distinct competitive advantage. Nevertheless, in the global competition landscape, including in China, Japan, South Korea, Europe, and the United States, China still has significant development space and substantial potential in digital service trade.

The Regional Comprehensive Economic Partnership (hereinafter referred to as January 1, 2022, has brought several "maximum" benefits to the three countries: first, the agreement covers 30% of the global population, 29% of the economic aggregate and 27% of foreign trade; second, the 15 members have different historical and cultural backgrounds and different levels of economic development and social systems; third, the member states in the agreement have a vast potential for development, with an average annual growth rate of 5.2%. The most striking aspect of the RCEP is that the three major economies of China, Japan, and South Korea have entered the same free trade zone for the first time. This was a historic moment. China, Japan, and South Korea are ranked second, third, and ninth, respectively, in 2021. Their economic strength far exceeds that of European

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Corresponding email: 1792063341@qq.com (Yuanciqian)
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countries, and they rank alongside the North American Free Trade Zone, making them a global financial center. Under the agreement, the GDPs of China, Japan, and the ROK exceeded 82%, a crucial component of high-quality economic development. Although economic and trade relations among China, Japan, and South Korea have been close for a long time, due to historical grievances and slow economic recovery following the financial crisis, the political situation remains volatile, creating significant obstacles to regional economic integration.

Against the backdrop of changing international conditions, the impact of globalization, and the risk of a global economic recession, the RCEP has demonstrated its strong vitality(Ma et al.). This is of great significance for promoting China-Japan-ROK economic and trade exchanges, deepening China-Japan-ROK economic and trade cooperation, and promoting economic and trade development in East Asia. China, Japan, and the ROK should accelerate the integration of higher-level international standards and seize new opportunities for digital trade development. This will not only open up new development space for the economic and trade growth of the three countries but also fill the gap in the Northeast Asia Free Trade Zone, promoting in-depth cooperation between China, Japan, and the ROK. In the post-epidemic period, China, Japan, and the ROK should seize the opportunity to expand bilateral exchanges and cooperation in economic, trade, and other areas, based on the agreement.

2. Digital development and trade changes in China, Japan, and South Korea under the framework of RCEP

2.1 ‘‘Digital China" contributes to Chinese-style modernization

We will accelerate the digitalization and industrialization of industries, promoting the vigorous development of the digital economy. China has made remarkable achievements over the past decade. Its data scale is the second largest in the world and has played an essential role in guiding and supporting China's economic and social development. Digital infrastructure construction has been removed. At the same time, China is also a world leader in telecom network construction. China has vigorously promoted the "broadband China" network and built the world's largest optical fiber and wireless broadband network, with its total mileage increasing by 2.7 times from 14.79 million km in 2012 to 54.81 million km.

Based on this, China has vigorously promoted the "use of cloud data" for enterprises, accelerated the development of the industrial Internet, digital commerce, and smart agriculture, and promoted the comprehensive and full-chain transformation and upgrading of traditional industries. In the process of digital industry development, China has increasingly independent innovation consciousness; China will unswervingly promote innovation-driven development, increase efforts in the core field, accelerate the bigger, stronger, and better, make up for its shortcomings, and form an independent and controllable industrial ecology (Ma) In emerging industries such as artificial intelligence, blockchain, and the Internet of Things, numerous foundational software and hardware platforms and open-source communities with independent intellectual property rights have emerged. The degree of scientific and technological innovation in key products has significantly improved, and an initial scale effect has emerged.

Currently, cooperation in the global digital economy is deepening. At the Second Internet Conference, General Secretary Xi Jinping elaborated on the critical thought of "building a community with a shared future in cyberspace,” and put forward "four principles" and "five propositions" on how to build and govern the global Internet. Xi general secretary at the G20 Rome summit in 2021, said China welcomes countries to join the digital economy partnership agreement, China is willing to work with relevant countries to promote the "Belt and Road" to a higher level of development, deepen the information infrastructure construction, deepen the digital industry, digital security cooperation in such fields, build digital silk road in the 21st century, let the global people share the digital economy development (Tang)(Zhang).

2.2 Japan is actively carrying out digital transformation

Japan has extensive experience in developing the digital economy, particularly in digital processing and mechanical processing. However, Japan had an early focus on intelligent manufacturing and was relatively unique in the application of innovative development and digital technology. In the process of Internet transformation, Japan's network development is relatively lagging, which limits its competitiveness in digital products and other areas. In the 21st century, especially under the influence of the global financial crisis, Japan has actively promoted the "reindustrialization,” integrated numbers with wisdom, and carried out systematic reform of the digital economy.

In terms of big data, Japan issued the Declaration on the Creation of the Most Sophisticated IT Countries five years ago, which proposed the strategy of focusing on the development of public data and big data from 2013 to 2020, and pointed out that "big data is indispensable to enhance Japan's competitiveness" and open information resources to the public.

To this end, Japan has also strengthened its research and development of big data and made significant investments in its data center operations to develop a range of new business models, thereby improving the competitiveness of the Japanese industry and expanding the scope of new industries. Additionally, the Japanese government has established a comprehensive intelligence-gathering system. In this system, a variety of materials from multiple industries and organizations can be opened to information providers and users.

In the process of digital reform, the behavioral motivation and execution tendency of enterprises will significantly change their industrial selection behavior. When promoting the digital economy, due to a lack of understanding of its macro and strategic aspects, it encountered major strategic challenges in developing digital technology.

To this end, in the future, promoting the digital transformation of enterprises will become one of the focuses of Japanese industrial policy: the construction of 5G will achieve comprehensive advancement; at the same time, the enterprise will vigorously promote the Internet of Things, artificial intelligence, and big data application in the field of business, actively transforming business models, improving the way of labor, and actively carrying out digital transformation.

2.3 South Korea's concept of building a digital power

South Korea attaches great importance to the development of the digital economy. Since the "Four Industrial Revolutions", it has increased its investment in "digital infrastructure". It holds a strategic position in 5G development and has reached an international advanced level, laying a solid foundation for the development of the "digital economy".

South Korea has played a leading role in formulating digital economy policies, increasing investment in the digital economy, and directing more social funds into its development efforts. Based on the above situation, South Korea has also performed well in the digital economy in recent years.At the end of September 2022, South Korea announced the Digital Strategy of the Republic of Korea, proposing the idea of "joining hands with the people to build a global digital power" and the strategic goal of "making another leap forward, co-prosperity, and moving towards a digital economic society" (Tian).

With this digital strategy, the government expects Korea to move from eighth to third in Lausanne, Switzerland, and the Organization for Economic Cooperation and Development remains first in the index of "digital infrastructure" and "digital government";

With the expansion of digital infrastructure, South Korea has gradually fostered an entrepreneurial atmosphere focused on deep technology. The construction of the Data Dam is a central project of South Korea's Digital New Deal, similar to the United States' New Deal, and part of the Hoover Dam project, which aims to collect and utilize information on both private and public land. It encompasses various areas, including culture, transportation, healthcare, finance, big data, and AI-based education. Second, South Korea and the European Union have established a new digital cooperation program to enhance cooperation in semiconductors, next-generation action networks, artificial intelligence, platforms, and materials.

3. Practical challenges facing China-Japan-ROK cooperation in the digital economy and trade fields

With the rapid development of digital technology, the digital economy cooperation between China, Japan, and the ROK has become increasingly close. However, the three countries still face many challenges in the actual process of collaboration. For example, changes in interest rates and expected returns, the high barriers to industrial digital transformation, and the US's obstacles to the economic and trade development of China, Japan, and the ROK may hinder digital economic and trade cooperation among China, Japan, and the ROK.

3.1 Change of interest demands and expected goals

In 2002, the idea of a China-Japan-ROK free trade zone proposed at the summit had not yet made any substantive progress, and it would be some time before the final agreement was signed. The agreement will lay a solid foundation for the construction of the China-Japan-ROK Free Trade Area and provide a crucial theoretical and practical basis for the smooth development of bilateral economic cooperation. Improving the efficiency and success rates of negotiations between the two sides is of great significance. However, the current situation has made the agreement uncertain.

First, the agreement maintains the three countries under the same FTA framework, and all are concerned about the need to re-sign the FTA. Second, Japan now focuses on the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP); since neither China nor South Korea has joined, there is likely to be competition among regional cooperation mechanisms. Third, doubts remain about who plays a leading role in free trade zones. In this context, when the trilateral economic and trade cooperation agreement between China, Japan, and the ROK is reached, the intention of some member states in the free trade agreement may decrease due to changes in their respective interests and expected goals. At this time, the difficulties arising from the trilateral economic and trade cooperation agreements cannot be underestimated.

3.2 The digital transformation faces high barriers

According to the White Paper on Global Digital Economy (2023), in 2022, the digital economy in the world, including the United States, China, Germany, Japan, and South Korea, totaled $31 trillion, accounting for 58% of the GDP, while China's digital economy accounted for a relatively small proportion. There are serious problems in the process of digitization: first, because of the many fixed assets and high technical level in the manufacturing industry, the fixed cost is relatively high, coupled with the lack of digital awareness, which leads to high barriers to digital transformation; second, the low investment in information technology products and services, and the high-end digital technologies, products, and services required for information transformation come from developed countries, so developed countries restrict them; third, there is a lack of specialized digital technicians; digital transformation requires a large number of new professionals familiar with digital technology, scientific and technological innovation, and digital management ability, and digital training in developing countries has just begun, industrial clusters have not yet formed, and there is still a big gap with other countries in the world.

3.3 The United States poses an obstacle to the economic and trade development of the three countries.

Based on its characteristics and values, the United States advocates the transnational flow of "multiple subjects" in the digital economy. It proposes the promotion of "digital authoritarianism" (digital authoritarianism). While Sino-US relations are in decline, the situation between China and Japan is not optimistic. As the United States' most critical Allies, Japan and South Korea are highly dependent on the United States' military. Therefore, South Korea's independence has long been restricted. In recent years, the United States has been committed to promoting the development of the region, but has not participated in the CPTPP intention; on the contrary, the area will be committed to building a conducive to promote trade liberalization, digital economy, technical standards, supply resilience, carbon emissions, clean energy, infrastructure, labor security, and other related fields of organization structure (Huang & You). In November, the US and Japan announced the establishment of the US-Japan Economic and Trade Partnership Agreement, which aims to foster greater collaboration in the labor, environmental, and digital sectors, with China as a key competitor. In the economic and trade relationship between China and Japan in the region, the dominant US strategy is the main obstacle to its most significant influence.

4. Strategies for coordinated digital economic and trade development between China, Japan, and the ROK under the framework of RCEP

4.1 Strengthening digital economic and trade cooperation

A rule-based multilateral trading system benefits the entire world. China, Japan, and the ROK should continue to strengthen their integration, regional economic and trade relations, and the resilience of their industrial chains, promoting global economic integration. The significant changes in the industrial structure of China and South Korea have expanded the scope of cooperation between the two countries, building on the original basis and facilitating digital transformation between them. This represents a new development direction between the two countries, with a focus on enhancing cooperation between them. Currently, both China and South Korea view digital technology as a crucial strategy for driving their economic development and fostering growth. The

Korean government considers digital technology a key focus for the future, attaching special importance to the development of the digital industry. It accelerates the innovation and application of digital technology, creating a new environment for growth and expansion. China will be committed to new infrastructure projects, including 5G, the digital economy, industrial Internet, artificial intelligence, cloud computing, and big data. It aligns with the South Korean version of the "New Deal" concept, with its core being South Korea's "digital New Deal."

China and Japan have significant advantages in scientific and technological innovation, and they are highly complementary. Especially in the digital economy, there is room for bilateral cooperation. Following the SARS outbreak, China's digital economy has experienced significant growth. At the same time, Japan has a strong scientific and technological heritage, as well as a technological innovation strength in the fields of "digital economy" and "smart city" (Jiang). At the same time, China and Japan have huge development potential in the fields of "digitalization", "e-commerce, etc. We should seize the opportunity to further promote practical cooperation between the two countries in the above fields and make it a new growth point of Sino-Japanese economic and trade cooperation (Ma & Li).

4.2 Opening up new tracks in new fields of the digital economy and trade

The first level is in the face of the external environment, China, Japan, and South Korea must be the potential, should the potential, make good use of the critical period of strategic opportunities, speed up the development of a higher level of open economy, the trend to expand their own development space, actively explore new mode of foreign economic cooperation, to open to the outside world to win the economic development and international competition (Han & Wang).

The second level involves adapting to the new trend of global economic development openly and cooperatively, fostering new advantages in international cooperation and competition, and becoming more closely integrated with the world economy. The third level presents an essential opportunity for free trade among China, Japan, and the ROK, promoting economic growth that is conducive to building a green supply chain, enhancing supply chain efficiency, and protecting the ecological environment.

4.3 Seize the potential development opportunities of RCEP

With the signing of the RCEP, some non-tariff barriers between China, Japan, and the ROK will gradually be removed, which is of great significance for promoting regional economic development and trade. In this process, the three countries, on the one hand, expect the agreement's implementation to bring financial benefits. On the other hand, they also hope to actively explore ways to enhance mutual understanding and communication by promoting economic and trade development, as well as trade and investment (Listening). Second, after the RCEP takes effect, a robust raw materials supply chain will be established among the three countries, making it imperative to strengthen regional cooperation.

China can not only purchase raw materials from Japan and South Korea but also work together with them to explore a third market and use digital technology to collaborate on areas such as disease prevention and treatment. It is not only an essential supplement to the multilateral trading system but also aligns with the trend of global economic development, peaceful development, and win-win cooperation.

4.4 Realizing mutual learning in new business forms and new models

China, Japan, and the ROK are among the three largest Asian countries. The economic complementarity of the three countries is high. Their industrial and supply chains are closely linked, which is conducive to strengthening the economic and trade exchanges between China, Japan, and the ROK. These three countries attach great importance to digital technology and have distinct characteristics in their technology presentations. The Japanese animation market leads in AI technology, South Korea's 5G technology is highly competitive, and China's VR technology has a broad market. These three countries have significant development potential across products, ecology, commerce, markets, and core technologies. More importantly, in the future, the three countries will jointly promote the healthy and orderly development of the digital economy. These three countries can collaborate to develop digital governance standards that serve their interests and foster high-quality, innovative business forms and models.

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Ethics approval and consent to participate
Not applicable. This study uses publicly available, de-identified secondary data and does not involve human subjects. Participants' or personal information.

Competing interests
The authors declare no competing interests.

References

Han, D., & Wang, L. (2023a). The Competitive Advantages and Development Prospects of China, Japan, and South Korea in the E-Commerce Field under the RCEP. *World Economic Research Center*(02), 13-17.

Han, D., & Wang, L. (2023b). Research on the Competitiveness and Cooperation Potential of China, Japan, and South Korea under the Framework of RCEP. *Foreign Economic and Trade Practice*(2).

Huang, Q., & You, C. (2023). Analysis of the Historical Background and Influencing Factors of the "Digital" Strategy in Korea. *Shanghai Academy of Social Sciences*(07), 20-25.

Jiang, Y. (2023). Japan and South Korea Have Endless "Policies" on the Digital Economy. What Should China Do? *Shanghai Academy of Social Sciences*(05), 20-29.

Listening. (2023). After the Official Implementation of RCEP, China and Japan Should Seize the Opportunity. 11-15.

Ma, K. Comparison and Outlook on "Digital Trade" in the Agreement and the CPTPP. *International Trade Studies*.

Ma, S., & Li, Z. The Characteristics, Reason, and Influence of "Digital Hegemony".

Ma, S., Liu, J., & He, G. (2022). Digital Trading Power: Concept Understanding, Indicator Construction, and Potential Research. *International Business Research*, 1-13.

Tang, X. (2021). China's "China Model" on the "Security of Data" and "Open" Issues. *Economy and Society*(12), 26-38.

Tian, Z. (2022). *An Analysis of the Development Cause and Trend of the Digital Economy in Japan* (Publication Number 2)

Zhang, L. The Practice and Discussion of China's Free Trade Zone Construction. *The New International Trade Rules*.