

Study on the Promotion of Digital Trade to Northeast Asian Regional Economy

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Abstract: Society is currently transitioning from the era of informatization and digitization to the era of intelligence. Advanced technologies such as artificial intelligence, the Internet of Things, and big data are permeating every aspect of production and life. This penetration presents a rare opportunity for the development of digital trade and catalyzes innovation in traditional trade patterns. This paper first analyzes the inevitability of digital trade development in Northeast Asia. Secondly, it delves into the challenges faced by digital trade development and explores in-depth the promotion strategy for digital trade's impact on the economic development of the Northeast Asia region, providing insights from various perspectives for reference.

Keywords: Digital trade; Northeast Asian regional economy; Promotion

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1. Introduction

Digital trade is an inevitable product of Internet development and technological innovation. It serves as a new engine for global economic development, contributing to the enhancement of economic resilience and risk resistance. Northeast Asia stands as a crucial direction for the Belt and Road construction, offering vast development potential. To transform it into a new economic growth hub, leveraging the region's complementary advantages and enhancing economic vitality, seizing the opportunity of digital trade becomes imperative. Exploring practical strategies to promote economic development and foster regional cooperation is essential.

2. The inevitability of developing digital trade in North-East Asia

At present, all industries are undergoing digital transformation, with the digital economy permeating every aspect of the global economy. This acceleration of the industry transformation lays a solid foundation for high-quality development. As a novel trade model, digital trade acts as the "propeller" for ongoing innovation and the healthy evolution of the trade sector. Benefiting from continuous advancements in digital technology, its applications in logistics, payment systems, sales, and other areas are expanding, enhancing the possibility of

digitizing and intellectualizing the digital trade industry chain ^[1]. Advanced technology and network platforms have significantly reduced the cost of digital trade, while improved information accessibility has led to a gradual increase in the participation of micro and small enterprises. This trend has particularly attracted numerous startups to engage in digital trade.

2.1. Transparency of trade information

Digital trade places emphasis on data as the core, leading to heightened transparency of product information. Buyers, in their product procurement processes, strive to access comprehensive product information to expand their choices and make well-informed decisions through thorough comparisons. Conversely, sellers can extract valuable insights from vast amounts of data. By analyzing various consumer profiles, sellers can pinpoint individualized needs and discern market trends. This extracted information serves as a basis for product repositioning and strategic marketing adjustments. Consequently, with the integration of digital tools into trade practices, both capital and information flows become richer. This enhances information traceability and fosters open and transparent trade processes, benefitting both buyers and sellers.

2.2. Computerization of management systems ^[2]

Conducting digital trade necessitates thorough market research, a pivotal step in overcoming information asymmetry and bolstering information exchange efficiency. Supported by Internet platforms, digital trade facilitates extensive market information collection and integration. Subsequently, integrated trade management systems are developed, enabling enterprises to access real-time market information according to their specific requirements. Leveraging this market intelligence, enterprises gain comprehensive insights into consumer demand, seamlessly connect with overseas buyers and Chinese suppliers, and devise practical strategies for international trade.

2.3. Smooth operation of the industrial chain

The success of foreign trade activities hinges on the seamless coordination of logistics, finance, manufacturing, and other facets. In the realm of the digital economy, advanced technological means and platform support have interconnected the information of upstream and downstream enterprises in trade, significantly reducing trade input costs. Digital trade features cross-border payment and logistics systems, allowing enterprises to flexibly integrate relevant information, thus cutting operational and time costs. Furthermore, with the integration of the industrial chain, various new retailing modes, such as smart retailing and omni-regional retailing, have emerged. The comprehensive layout of the digital trade industry provides digitized solutions for enhancing the effectiveness of digital trade.

3. Challenges to the development of digital trade

3.1. Lack of harmonized regional trade rules

In the process of developing digital trade in the Northeast Asian region, unified rules are imperative to ensure the healthy and sustainable development of digital trade. Such rules will also catalyze the digital economy's development in regional countries. While China, Japan, and South Korea have made relatively rapid progress in digital trade development compared to other Northeast Asian countries, there lacks a cohesive force among them. The region's countries have not established a practical implementation mechanism for safeguarding the digital economy, leading to challenges in aligning with digital trade rules. Currently, digital trade rules in Northeast Asia are still in the exploratory stage, covering the entire region ^[3].

3.2. Regional data exchange challenges

While digital trade is experiencing a surge, various factors impede efficient and free data flow within regional countries and regions. Specifically, the following aspects hinder progress:

Firstly, differing data statistical standards. Variances in the definition of digital trade concepts among Northeast Asian countries lead to inconsistencies in data statistics standards. Consequently, the comparability of similar data sets remains challenging.

Secondly, incomplete information communication. Driven by differences in objectives, some countries and enterprises in Northeast Asia refrain from active communication, opting for data concealment strategies. This lack of comprehensive data support in market analysis significantly diminishes analysis accuracy. At the national level, this communication obstacle becomes more pronounced, exacerbating information asymmetry among multinational enterprises and hampering digital trade development.

Thirdly, geopolitical instability. Prolonged geopolitical instability in Northeast Asia not only restricts economic exchanges and trade cooperation but also undermines overall digital trade development quality.

3.3. Need for improved platform dialogue mechanisms

An equitable dialogue mechanism serves as a pivotal channel for countries to achieve mutually beneficial cooperation. Northeast Asia has established the Regional Comprehensive Economic Partnership Agreement, representing China, Japan, and South Korea. However, this agreement fails to fully express deeper interests and demands. Similarly, the Greater Tumen Advocacy Mechanism, despite providing a broad communication platform between China, South Korea, Mongolia, and Russia, remains outdated due to geopolitical factors and has yet to address digital trade^[4]. In summary, existing government communication platforms in Northeast Asia inadequately cover the entire region, creating bottlenecks in regional economic development and hindering digital trade communication and cooperation.

4. Strategies for promoting economic development in Northeast Asia through digital trade

Spanning six countries in Europe and Asia, including China, Russia, Mongolia, Japan, North Korea, and South Korea, the Northeast Asian region boasts complementary economies and cultural interoperability. Consequently, it holds immense development potential. In the context of economic globalization, digital trade's role in economic development is increasingly significant. Exploring digital trade as a core strategy to promote effective economic development in Northeast Asia and leveraging its advantages is crucial for fostering high-quality regional economic development.

4.1. Achieving consensus on digital trade rules

While economic globalization and digital trade have to some extent promoted economic development in the Northeast Asian region, they have also brought accompanying economic security concerns. To effectively safeguard economic security, Northeast Asian countries must swiftly compile comprehensive digital trade rules or supplement existing ones. Overcoming regional resistance and internal and external factors, they should actively establish a consultation and exchange platform to support trade among countries, adhere strictly to international economic and trade rules, and endeavor to reach consensus on cross-border data flow, data localization, source code disclosure, cybersecurity, and other rules. This step-by-step approach aims to break down barriers to digital trade among regional countries, balance the protection of national trade interests with the promotion of digital trade development, and ensure the secure and free flow of cross-border electricity and data^[5].

China, as a major player in digital trade and the digital economy, possesses a solid foundation, promising prospects, and untapped potential. However, compared to Western developed countries, there is significant room for improvement in rule-making. China must actively engage in communication with developed countries, learn from their experiences and ideas in trade rule-making, and tailor them to China's specific national conditions and trade development needs. This approach aims to bridge the digital divide effectively. By identifying key areas for digital trade development and providing China-specific programs to higher standards, these programs can be organically integrated into the global digital trade rule framework. This not only facilitates the gradual formation of a digital trade system dedicated to the Northeast Asian region but also generates new momentum for digital trade. Simultaneously, it enhances China's voice in the international digital trade arena.

In the era of the digital economy, the cyberspace community of destiny, as a component of humanity's common destiny, plays a crucial role in promoting economic development and safeguarding global development security. The six countries of Northeast Asia should collaborate to build a cyberspace community of destiny, strengthen the cultivation of digital dividend-sharing mechanisms, and expedite the region's transition toward inclusive, universal, and resilient economic development.

4.2. Developing a program for cross-border data flow

Northeast Asian countries exhibit varying levels of economic development, resulting in significant disparities in the digital economy and digital trade. Influenced by both domestic and inter-country digital economic systems that are still under development, Northeast Asian countries encounter challenges in ensuring the freedom of cross-border data flow during digital trade activities. To promote the comprehensive development of digital trade, it is imperative for countries to actively develop relevant mechanisms^[6].

Firstly, establishing corresponding institutional mechanisms around domestic digital economies is crucial. Relying on the binding force of regulatory systems, countries must create a conducive environment for digital trade. At this stage, as some Northeast Asian countries are still in the early stages of digital system establishment, attention should be focused on domestic legislative efforts. These efforts should provide a robust framework for the digital transformation of market players, fostering an open, inclusive, fair, and equitable environment for digital economy development through digital empowerment. This approach aims to deepen economic and trade cooperation, enhance mutual trust and communication, and promote orderly cross-border flow of trade data, enabling true openness and sharing of data resources and fostering an environment conducive to high-quality digital trade development in Northeast Asia.

Secondly, imposing strict controls on import and export data would directly curtail cross-border data flow freedom, thereby hindering digital trade development. To address this, Northeast Asian countries should adhere strictly to the Regional Comprehensive Economic Partnership Agreement and clarify classification rules for cross-border data flow. Utilizing existing economic and trade exchange platforms and adopting strategies to relax cross-border data flow restrictions, while ensuring strict regulation of personal and sensitive information flows, will help balance information control with digital trade facilitation. The aim is to maximize cross-border data flow freedom under national security guarantees, effectively removing digital trade barriers.

Lastly, to enhance the convenience and efficiency of cross-border trade data flow, governments should delegate appropriate powers to enterprises. Enterprises should independently establish information security self-auditing systems and teams, enhancing information auditing efficiency and granting greater autonomy to enterprises. More importantly, this approach will drive enterprise participation in global digital trade, accelerating their transformation and upgrading processes. This initiative holds significant importance in promoting all-factor connectivity in the Northeast Asian region and China, serving as a cornerstone for high-

quality economic development.

4.3. Actively promoting regional cultural exchanges

The emergence of digital trade has completely transformed traditional transactional methods, highlighting the crucial significance of mutual trust among countries, particularly due to time differences. Throughout the long history of Northeast Asian countries, cultural borrowing and blending have been constant, resulting in a rich and diverse cultural heritage. This, combined with geopolitical relations, naturally facilitates digital trade exchanges among nations. However, factors such as geopolitical risks, extraterritorial jurisdiction policies, and maritime disputes have complicated relationships among Northeast Asian countries. The region's countries lack a strong sense of friendship, and economic growth has consequently stagnated. The primary issue lies in the lack of trust. To address this root problem, Northeast Asian countries must blend online and offline approaches, actively engaging in exchange and mutual appreciation activities to visually showcase their diverse cultural sentiments. Through cultural exchanges, people from various countries can understand one another, build trust, and enhance regional people-to-people relations, thereby laying a solid foundation for digital trade relations within Northeast Asia.

Organizing the Northeast Asia Expo annually, themed around “Building Northeast Asia Together,” serves as a platform for forums and promotional meetings. These events comprehensively showcase economic and trade cooperation between China and Northeast Asian countries, expanding cooperation in scope, breadth, and depth. Through forums and promotional meetings, communication among countries is continuously enhanced, fostering consensus-building, mutual trust, and long-term cooperation. In the long run, this approach can deepen multilateral economic and trade cooperation, gradually creating new momentum for the economic development of the Northeast Asian region.

4.4. Expanding cooperation opportunities in the digital field

China's northeastern region lies at the core of Northeast Asia. To foster rapid and robust development of digital trade, leveraging the role of early pilot implementations is recommended. By capitalizing on open demonstration zones, active cooperation in the digital economy can be pursued, facilitating the establishment of digital economy regulations and paving the way for a prosperous future for the region's digital economy.

Firstly, Northeast Asian countries should prioritize emergency prevention and seek wide-ranging multi-party cooperation. Utilizing digital technology to establish a rapid information exchange platform enables close monitoring of neighboring countries' dynamics. This facilitates the timely identification of emergencies and corresponding information, allowing for swift intervention strategies to minimize economic impact and control the scope of disruption.

Secondly, by embracing reform and technology, Northeast Asian countries should expedite the development of smart customs. Leveraging advanced technologies such as artificial intelligence and big data analysis, logistics information platforms and intelligent monitoring systems can be constructed. These innovations significantly enhance overall logistics efficiency, enabling enterprises to make informed predictions and flexibly respond to evolving market needs. This breaks down spatial and temporal constraints in economic and trade activities, fostering a higher level of openness.

Moreover, digital talent development is crucial. With the flourishing trend of the digital economy, the shortage of technical personnel poses challenges. Whether in digital trade or Northeast Asian regional economic development, high-quality skilled personnel are indispensable. Northeast Asian countries must bolster academic and technical exchanges, continuously nurturing highly skilled professionals and cultivating industry-specific

high-end talent. By aligning talent cultivation with the current state and needs of digital trade development and regional economic growth in Northeast Asia, the introduction mechanisms for exceptional talent should be flexibly adjusted. This ensures an ample reserve of high-quality human resources to drive the development of digital trade in the region.

4.5. Deepening economic and trade cooperation among regional countries

As early as 2013, China officially proposed the overarching goal of constructing the “Silk Road Economic Belt.” Russia and Mongolia actively joined hands with China in building economic corridors, fostering increased exchanges among Northeast Asian countries in political, economic, and cultural spheres, further advancing global economic and trade interconnectivity. Infrastructure development and economic and trade connectivity have significantly bolstered economic growth in the Northeast Asian region, fostering a stable and mutually beneficial relationship among all parties. Even amidst major public health crises, such as the COVID-19 pandemic, the China-Mongolia-Russia Economic Corridor has played a pivotal role in steering global trade out of adversity. Employing the “five links” strategy, which encompasses policy communication, facility connectivity, streamlined trade, financial integration, and people-to-people relations, the corridor has facilitated the orderly resumption of work, production, and business operations, striving to stabilize the economy in challenging times.

Nevertheless, the economic development levels of China, Mongolia, and Russia vary significantly, resulting in unbalanced trade structures and a pressing need for digital transformation within the economic corridor. It is imperative to enhance digital infrastructure, implement digital technological innovation, and promote the digital transformation of industrial structures. Reconfiguring feasible digital trade rules is essential to bridging the digital divide among these countries, thereby enhancing the strength of digital trade development and trade exchanges, and injecting new momentum into regional economic growth in Northeast Asia.

The Greater Tumen Initiative serves as a subregional cooperation mechanism. Since its formal operation, Northeast Asian countries have expanded exchanges and cooperation to include transportation, tourism, energy, and other sectors, significantly fostering regional economic cooperation. In the future, Northeast Asian countries can leverage this mechanism to further promote regional exchanges and cooperation. By integrating digital trade into the scope of cooperation, they can collaboratively explore applicable digital trade rules in the region, progressively deepen cooperation content, and expand cooperation areas. This initiative aims to rejuvenate economic and trade cooperation in Northeast Asia and foster innovative development in digital trade.

5. Conclusion

In conclusion, digital trade presents a valuable opportunity to advance the Belt and Road initiative and expedite regional economic cooperation and integration in Northeast Asia. It is imperative for Northeast Asian countries to seize this opportunity firmly. Key challenges facing digital trade in the region include the lack of unified regional trade rules, hindrances to regional data exchanges, and the need to enhance the platform dialogue mechanism. Addressing these challenges requires comprehensive strategies such as consensus-building on digital trade rules, formulating programs for cross-border data flows, actively promoting regional cultural exchanges, expanding cooperation opportunities in the digital field, and deepening economic and trade cooperation among regional countries.

To further promote regional digital trade and enhance international market access, a holistic approach is necessary. This involves reaching a consensus on digital trade rules, formulating programs for cross-border data flows, actively engaging in regional cultural exchanges, expanding cooperation opportunities in the digital field,

and deepening economic and trade cooperation among regional countries. Such measures will provide essential support for the high-quality development of the regional economy and enterprises. They will also contribute to stabilizing foreign trade and investment, paving the way for the establishment of a dual-circle development pattern between domestic and international markets as soon as possible.

Disclosure statement

The authors declare no conflict of interest.

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