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Digital Trade Promotion Mechanism and Effect Evaluation in the Development of Jiangsu Digital Belt and Road

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Abstract: As an important part of the Belt and Road Initiative, the Digital Belt and Road (DBAR) is of great significance to promoting the digital transformation of the global economy and the high-quality development of the regional economy. As a major economic province along the eastern coast of China, Jiangsu plays an important role in the construction of the DBAR. Based on the development status of DBAR and digital trade in Jiangsu, this article describes in detail the general situation of the construction of DBAR in Jiangsu, the development status and characteristics of digital trade, and the digital infrastructure and technical support. It is found that Jiangsu has successfully promoted the rapid development of digital trade by building a sound policy environment, innovating service platforms and strengthening international cooperation, and achieved remarkable economic and social benefits. However, the rapid development of digital trade has also brought a series of challenges and problems. Aiming at these problems, this article puts forward some optimization suggestions. It provides a reference for the research in related fields and is of great significance for promoting the construction of the DBAR and the healthy development of digital trade.

1. Introduction

Under the dual impetus of globalization and digitalization, the DBAR has become a new link to connect the economies of various countries and promote global trade [1]. As an important part of the Belt and Road Initiative, the DBAR bears the mission of deepening international cooperation and promoting common prosperity, and it is also a key force to promote the digital transformation of the global economy. Jiangsu province is an economic province along the eastern coast of China [2]. With its deep industrial foundation, active digital economy and innovative technology application, Jiangsu plays an important role in the construction of DBAR [3]. The purpose of this study is to deeply analyze the development status of digital trade in Jiangsu under the framework of DBAR, and to explore how its promotion mechanism can effectively stimulate economic vitality. This is of great theoretical value and practical significance for understanding the new rules of international trade in the era of digital economy and promoting the high-quality development of

regional economy. Through this study, we expect to provide reference experience and enlightenment for the development of digital trade in other regions and even countries.

The core purpose of this study is to reveal the promotion mechanism of digital trade in the development of Jiangsu DBAR, and to evaluate the practical effects of these mechanisms on economic growth, industrial upgrading and changes in international trade pattern. Nowadays, the research on DBAR and digital trade has begun to take shape, but most of them focus on macro-level theoretical discussion and international comparison [4]. Some studies pay attention to the influence of the DBAR on the global economic structure, and emphasize the potential of digital technology in promoting trade facilitation and reducing transaction costs [5]. Another study focuses on the digital trade practice in a specific country or region, and analyzes the role of policy innovation and technology application in promoting the change of trade model [6]. However, the detailed research on the digital trade promotion mechanism in the construction of the DBAR in this specific area of Jiangsu is still insufficient [7]. This study will fill this research gap on the basis of previous research results and the actual situation of Jiangsu. This article explores the unique path and successful experience of digital trade development in Jiangsu, and provides a new perspective and in-depth analysis for the research in related fields.

2. Jiangsu DBAR and the Development Status of Digital Trade

2.1. Overview of the construction of Jiangshu DBAR

In recent years, Jiangsu has actively responded to the national "Belt and Road Initiative" and vigorously promoted the construction of the DBAR, which has achieved remarkable results. As an important hub city at the intersection of the Belt and Road Initiative, Nanjing has taken new steps in deepening opening up and strengthening international cooperation [8]. In September, 2024, Jiangsu Central Asia Center officially opened in Xuanwu District, Nanjing, marking a new stage of development in trade, investment cooperation and cultural exchanges between Jiangsu and Central Asia. Jiangsu Central Asia Center has set up a service platform for Central Asia and its neighboring "Belt and Road" countries, and at the same time opened up functional sectors such as trade cooperation, business docking, technology export, cultural exchange, publicity and display. This provides strong support for Jiangsu enterprises to expand the international market. Jiangsu also actively participated in the Global Digital Trade Expo and other activities, displaying new technologies, products, services and new scenes in the field of digital trade, which further promoted the construction of the DBAR.

2.2. Development Status and Characteristics of Jiangsu Digital Trade

As a big economic province, Jiangsu has a strong momentum of digital trade development. According to the statistics of Nanjing Customs, in the first three quarters of 2024, the total import and export value of goods trade in Jiangsu Province reached 4.12 trillion yuan, a record high in the same period, with a year-on-year increase of 7.7%, which was 2.4 percentage points higher than that of the whole country. Among them, the import and export of private enterprises was 1.85 trillion yuan, up 10.5% year-on-year, becoming the "backbone" of Jiangsu's foreign trade. The characteristics of Jiangsu digital trade are shown in Table 1:

Table 1: Characteristics of Jiangsu's Digital Trade

Characteristic Description	Specific Manifestations
High Degree of Digitization	Utilizes big data, cloud computing, and other technologies to achieve full digitization of the transaction process
Wide Range of Trade	Covers multiple sectors including goods, services, and technology, involving numerous countries and regions globally
High Transaction Efficiency	Achieves rapid transactions, settlements, and logistics through electronic means, shortening the transaction cycle
Strong Innovation Capability	Continuously spawns new business forms and models, driving industrial transformation and upgrading
Significant Policy Support	The government has introduced multiple support policies, optimizing the business environment to facilitate digital trade development
Deep Industrial Integration	Digital trade is deeply integrated with the real economy, promoting synergistic development across the industrial chain

2.3. Digital Infrastructure and Technical Support

The construction of the DBAR is inseparable from the perfect digital infrastructure and strong technical support. Jiangsu has made remarkable achievements in digital infrastructure construction. It includes communication network, data center and cloud computing platform, which provides strong support for the collection, transmission, storage and processing of large-scale data. Jiangsu also actively promotes the application of cutting-edge technologies such as Internet of Things technology, big data and artificial intelligence, which provides a solid foundation for the intelligent management and operation of digital cities. For example, in Wuxi, the Internet of Things technology has been widely used in more than 300 sub-sectors. In Suzhou, the 5G industrial Internet platform integrates a variety of manufacturing business scenarios, which reduces the operating costs of enterprises by 10% and increases the production capacity by 15%.

3. The Digital Trade Promotion Mechanism in Jiangsu's DBAR

3.1. Policy Environment and Support Measures

In the process of promoting the construction of DBAR, Jiangsu attaches great importance to the optimization of policy environment and the improvement of supporting measures. The government has issued a series of support policies aimed at reducing the cost of digital trade for enterprises and improving the level of trade facilitation. These policies include tax incentives, financial subsidies, financing support and other aspects, which provide a good development environment for digital trading enterprises. Jiangsu has strengthened the construction of laws and regulations related to digital trade, clarified the principles for handling key issues such as cross-border data flow and intellectual property protection, and provided legal protection for the healthy development of digital trade. At the same time, the government also actively builds a public service platform to provide one-stop services such as information consultation, market docking and legal aid to help enterprises better integrate into the global digital trading system.

3.2. Platform Construction and Service Innovation

In order to promote the rapid development of digital trade, Jiangsu has continuously

strengthened platform construction and service innovation. On the one hand, Jiangsu actively builds characteristic platforms such as cross-border e-commerce comprehensive experimental zone and digital service trade demonstration zone. These platforms integrate transaction, payment, logistics, warehousing and other links, providing a convenient one-stop service for digital trade. On the other hand, Jiangsu encourages enterprises to use advanced technologies such as big data, cloud computing and artificial intelligence to innovate service models and improve service efficiency. The construction and service innovation of Jiangsu digital trading platform are shown in Table 2:

Table 2: Jiangsu's Digital Trade Platform Construction and Service Innovation

Initiative Description	Specific Examples
Building Specialized Platforms	Cross-border E-commerce Comprehensive Pilot Zone: Integrating transaction, payment, logistics, and warehousing functions to provide one-stop services
	Digital Service Trade Demonstration Zone: Focusing on the digital service sector, promoting industrial agglomeration and innovation
Leveraging Advanced Technologies	Big Data Applications: Analyzing consumer behavior to precisely push personalized products and services
	Cloud Computing Services: Providing efficient data storage and processing capabilities, reducing enterprise operating costs
	Artificial Intelligence Applications: Intelligent customer service, automated trading, etc., enhancing service efficiency and quality
Innovating Service Models	"Online + Offline" Integration: Combining physical stores with online platforms to create a new shopping experience
	Customized Services: Providing personalized customization services based on customer needs to meet diversified demands
	Platform Cooperation and Sharing: Collaborating with other platforms, sharing resources, and expanding market channels

3.3. International Cooperation and Market Expansion

In the construction of the DBAR, Jiangsu always adheres to the principles of open cooperation and mutual benefit, and actively expands international cooperation and market space. Jiangsu actively participates in the formulation and discussion of international digital trade rules, strengthens policy communication and cooperation with countries and regions along the Belt and Road, and jointly promotes the liberalization and facilitation of digital trade. At the same time, Jiangsu has set up an international exchange platform by holding international digital trade fairs, cross-border e-commerce conferences and other activities to attract high-quality resources and projects from all over the world to settle in Jiangsu. Jiangsu enterprises are also actively "going out", setting up R&D centers and marketing networks overseas, constantly expanding the international market and enhancing international competitiveness.

4. Effect Evaluation and Optimization Suggestions of Digital Trade Promotion Mechanism

4.1. Effect Evaluation

In recent years, the implementation of Jiangsu digital trade promotion mechanism has achieved remarkable results. From the perspective of economic effects, the rapid development of digital trade has strongly promoted the transformation and upgrading of Jiangsu economy and high-quality

growth. Digital trade has provided new sales channels and market space for traditional manufacturing industries, and at the same time, it has spawned emerging formats such as cross-border e-commerce and digital services, and has become a new engine for economic growth. The prosperity of digital trade has also promoted the development of related industrial chains and formed a good industrial ecology. In terms of social effects, digital trade promotes the optimization of employment structure and the improvement of talent quality, and provides more diversified employment opportunities for young people. It also promotes the free flow of information and knowledge sharing, and accelerates the pace of technological innovation and industrial upgrading.

4.2. Challenges and Optimization Suggestions

Although Jiangsu digital trade promotion mechanism has achieved remarkable results, it still faces some challenges and problems. The challenges and problems faced by Jiangsu digital trade are shown in Figure 1:

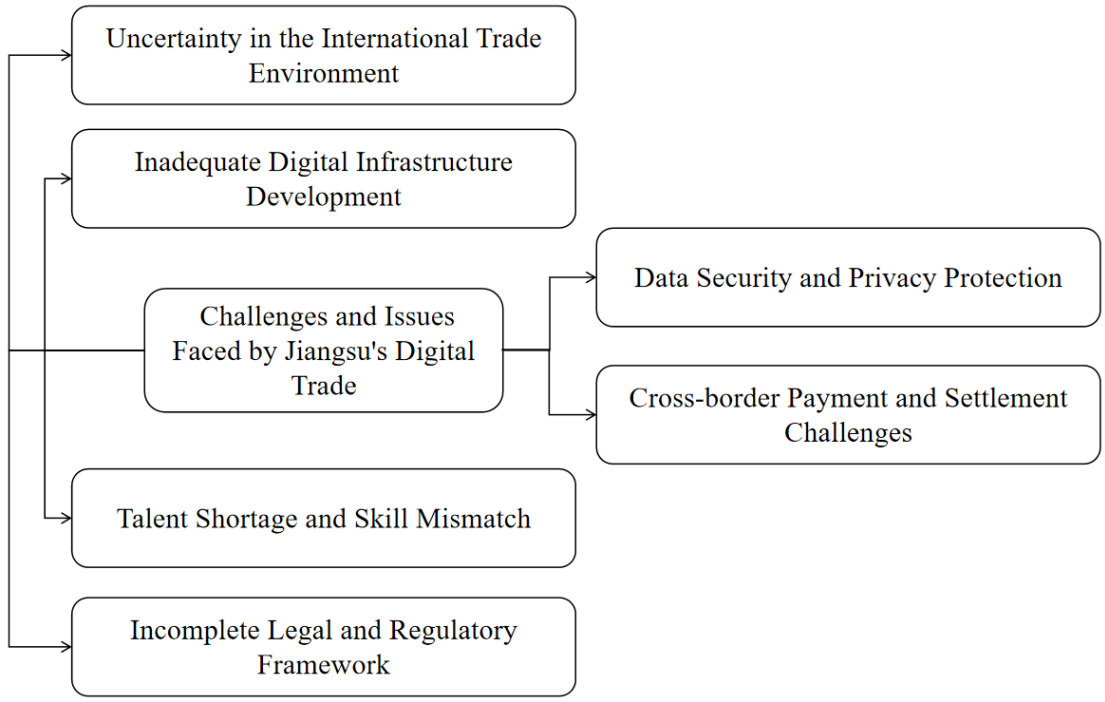

Figure 1: Challenges and Issues Faced by Jiangsu's Digital Trade

In view of the challenges and problems in Figure 1, the following optimization suggestions are put forward: ① Strengthen the construction of digital trade supervision system, improve relevant laws and regulations and supervision mechanism, and ensure the healthy and orderly development of digital trade. At the same time, actively participate in the formulation and discussion of international digital trade rules, and enhance China's international voice in the field of digital trade. ② Increase the support for small and medium-sized enterprises, and help them to improve their digital trading capabilities and achieve sustainable development by providing services such as financing support, technical training and market development. ③ Promote the deep integration of digital trade and real economy, encourage enterprises to use digital technology to improve production efficiency and product quality, and expand new market space. ④ Strengthen cooperation between Industry-University-Research, promote technological innovation and transformation of achievements, and provide a steady stream of power for the development of digital trade.

5. Conclusions

Through in-depth analysis of the digital trade promotion mechanism of Jiangsu in the construction of DBAR, this article finds that this mechanism has played a vital role in promoting the rapid development of digital trade in Jiangsu, promoting economic transformation and upgrading and high-quality growth. Digital trade has brought remarkable economic benefits to Jiangsu, and at the same time has produced far-reaching social impact. These influences include promoting information circulation, accelerating technological innovation and optimizing resource allocation. By building a sound policy environment, innovating service platforms and strengthening international cooperation, Jiangsu has successfully created a digital trade development path with distinctive characteristics and strong competitiveness. This provides valuable experience and demonstration samples for the development of digital trade in China and even the world.

Future research can strengthen the research on new formats and modes of digital trade, and track and reflect the latest development trends of digital trade in time. In the future, we will have a deeper understanding of the development law of digital trade and better promote the construction of DBAR and the healthy development of digital trade.

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