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Innovation of Cross-Border E-Commerce Logistics Model Based on Decentralized Block Mining Model

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Abstract:This paper collects the case data of supply chain financial products based on blockchain technology. Through case analysis, combined with the business development of Z Bank's blockchain receivables platform, the platform business model process and risk control measures are sorted out and further analyzed.The research found that the Silk Chain cross-border e-commerce platform business model can make up for the shortcomings of the traditional cross-border e-commerce model, but compared with the cross-border e-commerce platform based on the public chain, the SilkChain model also has limitations, such as the SilkChain business model. The model relies heavily on traditional cross-border e-commerce platforms to provide industry resources and experience.

Keywords: Cross-Border, E-Commerce, Logistics Model, Decentralized Block Mining

1. INTRODUCTION

The development status, characteristics and deficiencies of my country's cross-border e-commerce business model. This part aims to clarify the basic situation of the business model of the Internet-based cross-border e-commerce platform [1]. By sorting out the business models of mainstream cross-border e-commerce platforms and based on the "three-dimensional conceptual model", in 2018, the world was filled with protectionist sentiments and unilateralism prevailed. country's trade war. The Sino-US trade war has become the focus of the world and will inevitably bring new challenges and pressures to cross-border trade [2]. Most foreign scholars start to study supply chain financial business from the perspective of enterprises. They mainly carry out relevant research and exploration on supply chain financial business from the perspective of how enterprises can better conduct production operations, capital operations and cash management [3].

Introduce the research background and significance, and describe the research content, methods, technology roadmap, innovations and deficiencies [4]. Internet technology has promoted traditional international trade from offline to online, cross-border e-commerce has become an emerging international trade method, and cross-border e-commerce platform business models have also emerged [5]. And expounds the working principle of applying the core technology to supply chain finance, so as to obtain the applicability of blockchain technology to supply chain finance and provides a template for more commercial banks to use blockchain technology, so as to enable more small and medium-sized enterprises Businesses benefit from it [6].

With the deepening of economic globalization and trade internationalization, the role of the shipping industry in promoting the integration of my country's economy and the global economy has become more and more prominent [7]. More frequent at present, there is no efficient collaboration model between various business segments, a lot of paper work and input work are required between different business segments, lack of data sharing mechanisms and system sharing capabilities, and communication costs are extremely high; International cross-regional [8]. Lee and Rhee et al. (2011) indicated that in international supply chain finance, the management and control of corporate commercial credit risks can be better achieved, which is significantly better than the credit risk management and control of financial companies for individual companies [9].

Hofmann and Belin (2011) analyzed some international supply chain financial models. The emergence of SilkChain means that traditional cross-border e-commerce platforms have begun to explore the possibility of applying blockchain technology to business model innovation in cross-border e-commerce platforms [10]. The chain case will help to promote the transformation and upgrading of the traditional cross-border e-commerce platform business model. It is mainly based on the three major domestic mainstream models, the logistics enterprise-led model [11], the commercial bank-led model and the core enterprise-led model. And analyze the advantages, applicable objects and legal regulations of the three modes respectively. In addition, in the emerging field of e-commerce, Guo Ju'e, Shi Jinzhao, and Wang Zhixin (2014) elaborated on how supply chain finance is divided and developed in B2B online. The settlement efficiency of Wuhan Shipping Clearing Center based on blockchain [12].

This section is based on the basic assumptions of the settlement efficiency model of the Wuhan Shipping Clearing Center. Blockchain technology is a chain data structure [13], and a distributed ledger guaranteed by cryptography that cannot be tampered with and cannot be forged, has a weak center [14]. It has the characteristics of transparency, openness, traceability, cross-validation, encrypted authorized access, etc. At present, the regulatory authorities of various countries and regions around the world [15]. Hu Yuefei (2009) proposed that supply chain finance can effectively reduce the time cost and financial cost for SME financing and can also enhance the overall competitiveness of the industry. Xia Taifeng and Jin Xuejun (2011) pointed out that supply chain finance provides a direction for solving the problem of financing difficulties for SMEs [16]. Studying the Silk Chain case will help promote the transformation and upgrading of the business model of traditional cross-border e-commerce platforms, explore the development direction of the business model of cross-border e-commerce platforms based on blockchain, and help grasp the business model under the new

generation of information technology revolution. Model innovation opportunities [17].

2. THE PROPOSED METHODOLOGY

2.1 The Decentralized Block Mining Model

Cheng Hua and Yang Yunzhi (2016) conducted research and analysis on the different scenarios of blockchain technology in the financial field, explained the influence of blockchain technology in the traditional financial field, and proposed that commercial banks should use blockchain technology. Objectively understand and utilize this technology. Since the founding of New China, China's economic development level and cross-border trade have achieved leapfrog development, and achieved results that are admired by the world. The rapid development of China's cross-border trade has benefited from the guidance of China's reform and opening-up policy, as well as the continuous improvement and innovation of China's foreign trade policy. For transaction information at a certain point in time, a block is generated, and the block guards are connected to form a complete Verified, traceable data chain.

Support to provide retrieval and search functions for each piece of data, which can be verified one by one to prove the ownership of the secretary, which cannot be forged. The second category is based on the perspective of enterprise profit model. Some scholars believe that business model not only refers to the operation mechanism of the enterprise, but also includes the profit mechanism of the enterprise. This type of research focuses on the value acquisition of business models. For example, Georg and Bockm. (2011) believe that business models are methods for enterprises to allocate resources to obtain new profit opportunities. All enterprises can obtain "Haier Free Loan". This business model effectively integrates the funds of Ping and Bank, the professional advantages of supply chain finance and the distribution model of Haier Group. It is assumed that any participant of the two shipping settlement centers is single-owned, that is, one participant joins the Once the shipping settlement center 1 is established, the shipping settlement center 2 will not be added, and vice versa.

Since joining the WTO in 2001, China's cross-border trade relations have gradually deepened, showing a trend of diversified development. Data released by the Ministry of Commerce shows that the structure of China's export commodities has gradually shifted from light industry, low-value-added raw materials and products in the early stage to high-value-added, high-tech and finishing industrial products. The definition of supply chain is somewhat controversial.

2.2 The Cross-Border E-Commerce

Among them, Professor Song Hua from the School of Business of Renmin University of China gave a more standardized definition of supply chain finance: relying on core customers, on the premise of real trade background, using self-paying trade financing, through accounts receivable pledge Registration. Gao Bo (2018) analyzed the pain points of financial institutions in developing supply chain finance business, and found that there are challenges in supply chain finance business such as credit identification, transaction supervision, risk management and control, etc.

On this basis, the application of blockchain technology blockchain in supply chain financial business is analyzed to ensure a certain transparency of the supply chain. However, this requires accurate input and storage of data, so that users on the chain can accurately use the data for transactions. It is also necessary for the enterprises on the chain to have a certain trust system. The chain in the supply chain is too long, and the transaction data is easy to be missing. According to the previous analysis, it is found that there is great uncertainty in the information between the cargo owner and the shipping company without the blockchain, and the blockchain model improves the relationship between shipping transaction entities. Because of the information asymmetry, there can be direct transactions between cargo owners and shipping companies.

Trust is an important element in cross-border trade. The logistics, capital flow and data flow in the business all need to rely on trust to maintain. However, in the current cross-border trade environment, there are few technologies that can be used to support trust. Instead, traditional paper guarantee documents and supply chain financing enable banks to control risks in the financing process from a dynamic and systematic perspective. The supply chain financing model can effectively control the credit risk of small and medium-sized enterprises, combining information flow, logistics, capital flow and business flow. However, in practice, the lack of a unified business information system among enterprises makes it difficult to unify the four streams. The development of my country's cross-border export e-commerce platform can be divided into three stages.

2.3 The Innovation of E-Commerce Logistics Model Based on Decentralization

The first stage: From 1999 to 2003, the cross-border e-commerce platform mainly provided product display and information disclosure services. The main representative company in this stage was Alibaba; the second stage: 2004 to 2012. The operational risk of the bank can be controlled according to the internal standardized process of the bank, but the agent has a deeper understanding of the business in the business link, and the bank is more dependent on the professional ability of the agent in the business. So, there will still be operational risk on the agent side. This section explores the impact of blockchain on the settlement efficiency of Wuhan Shipping Clearing Center by comparing the changes in the welfare level of Wuhan Shipping Clearing Center under the conditions of no blockchain and with blockchain.

Among them, the reasons for the participation of Internet-based cross-border e-commerce platforms will be analyzed in detail below. In the second part, for the participants in the implementation of the blockchain system, it is also necessary to include representatives of the platform manager, technical development and maintenance personnel. Because, considering the cost factor, it can be seen that the blockchain has a high added value to the welfare level improvement of the Wuhan Shipping Clearing Center. The added value of blockchain to the welfare level improvement of Wuhan Shipping Clearing Center without considering the cost factor.

Small and medium-sized import enterprises: First, due to the low credit rating of the enterprise, it takes a long time and is difficult to collect relevant information on customs declaration and risk assessment, and the customs clearance efficiency is lagging; second, it is difficult to obtain timely information on customs clearance and logistics, which is not conducive to customs declaration and logistics. The planning arrangement. Blockchain receivable confirmation and reconfirmation. Confirmation, that is, before the payment and transfer of the receivable, the confirmer provides credit

enhancement support for the full payment of the acceptor when the receivable is due according to the application of the confirmation applicant, or directly confirms.

3. CONCLUSIONS

Decentralization is an important feature of blockchain. There is no clear subject in decentralization, and there may be problems in supervision. As blockchain projects become geographically more decentralized and anonymous, domestic regulators need better laws and regulations to deal with violations of their laws under the new circumstances. And from the three dimensions of platform services, operating systems and economic feasibility, it summarizes the three characteristics of cross-border e-commerce platforms based on blockchain: the diversification of platform services, the integration of social e-commerce into the platform and a stable token system.

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