Research on Russian Cross-border E-Commerce Logistics Platform based on Block Chain Technology

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ABSTRACT

The block chain technology has the characteristics of centralization, information non tampering, transparent disclosure, information security and so on. It is used on the cross-border e-commerce logistics platform to help solve the differences in the cross-border e-commerce trade between China and Russia, so that the cross-border e-commerce can develop smoothly and perfect the construction of Russian cross-border e-commerce logistics platform.

KEYWORDS

Block chain, Russia, cross border e-commerce, logistics platform.

INTRODUCTION

At present, the block chain technology has developed rapidly. Some people say "block chain technology is another great technology after Internet technology". In the rapid development of this block chain, all walks of life use the block chain technology to solve the pain point of the industry. At present, Sino Russian cross-border electricity providers are booming, but to explore the Russian market, it is inevitable to identify logistics links. For cross-border electricity providers in the Russian market, the situation in Russia cannot be speculated or assumed solely on the basis of domestic conditions, otherwise it may cost a lot.

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RESEARCH STATUS

Because of the rapid development of block chain technology, the competition has been extended to the global scope, which will inevitably affect the development of various industries, including cross-border e-commerce. This phenomenon has also attracted a batch of scholars from and outside the country to carry out the research. Huixin Yan (2016) through the research shows that the cross-border logistics of Heilongjiang province is still a lot of problems, whether from the basic issues of speed, price and other basic problems, such as logistics and distribution, information collection and other development factors. Liu Xun (2018) believes that in recent years, Sino Russian cross-border e-commerce has developed rapidly. With the continuous development of China Russia and Russia's economic and trade cooperation strategy, Sino Russian cross-border e-commerce faces new opportunities for development. Chunyu Zhou (2018) shows that in the booming e-commerce, Sino Russian cross-border trade is particularly eye-catching.

BLOCK CHAIN TECHNOLOGY

Block chain technology uses block chain data structure to verify and store data, use distributed node consensus algorithm to generate and update data, use cryptography to ensure the security of data transmission and access, and to use an intelligent contract composed of automated scripting code to program and operate data. Infrastructure and computing.

Centralization

Centralization is the center of diversification, and anyone can become a center. In the centralization system, anyone is a node, and anyone can become a center. This open, flat and equal system phenomenon or structure is called de centralization.

To Trust

To trust is not to be untrustworthy or not to need credit, but to use technology rules to maintain credit and to achieve self-restriction through algorithms. Any malicious cheat system will be rejected by other nodes. Therefore, it does not rely on the credit endorsement of the central authority, to a certain extent, it can replace the traditional credit construction.

Traceability

Detailed transaction information is recorded in the block, and all transaction information is in the form of blocks. In the block chain, any block records the whole
information of the last block, and any transaction can be traced, and a complete block chain is retained on any node.

PLATFORM CONTENT AND STRUCTURE

A cross border e-commerce framework based on block chaining. China's trade market environment and trade market structure are very different from Russia. In order to make the cross-border e-commerce development of Russia, it is necessary to build a harmonious and unified trade ecological environment. The cross border ecommerce ecosystem in this paper is based on the block chain, which includes the integrated service platform system of cross-border e-commerce, the credit risk management system and the system of the supply chain intelligent system.

In this framework, block chaining technology is built up at the bottom of the system, and it runs with the feature system of block chain technology.

A large data platform based on block chain basic data storage platform is established based on the cross border e-commerce integrated service platform based on block chain, which forms centralized, trust and traceability. Store the commodity information strictly inside the platform, and form a good docking with the supply chain system, so that the customer can query the various information of the goods, thus enhancing the user experience. Secondly, through the block chain to ensure the security of network payment, the establishment of a third party consumer centered payment authentication system, to strengthen the sense of security of the payer. Finally, a decentralized transaction platform is established to realize the point to point consumption mode and to minimize transaction cost fundamentally.

Based on the block chain's cross border logistics system, a storage database based on block chain is built to connect the ports of its database with the integrated service platform. Secondly, the intelligent storage platform based on storage is put forward, and intelligent management is carried out according to the principle of block chain.

PROBLEMS IN REALITY

Because the application time of block chain technology in cross-border e-commerce logistics is relatively short, there are still great shortcomings in application technology, application mechanism and talent demand. Therefore, it is necessary to clarify the challenges faced by the application of block chaining technology in cross-border e-commerce logistics industry. The block chain technology is applied to the cross-border e-commerce logistics platform, which can record and save the information data completely, but the different network protocols between each node make the information in the block chain security problems.

To solve this problem fundamentally, we must wait for the complex customs clearance procedures to wait for Russia's overall economic situation and policy
changes. Russian customs, border management, airport, port management institutions still have corruption, if the means of bribery to speed up the speed of the goods in the short term, it is illegal, second, will increase the demand for the future of officials. The marketing means of Chinese logistics enterprises are not good, and a large part of these enterprises are still operating according to the postal agent. The marketing means are mainly to go to the exhibition, the transportation hub and send the advertisement, call the fax, and play the most traditional offline marketing means with the customers. Enterprises with their own independent electronic sales platform are simply few and cannot satisfy the logistics demand of the electricity supplier era.

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Block chaining technology is developing rapidly all over the world, but its application in logistics express industry is still in its infancy. A mature block chain system requires a trade-off between the degree of centralization and the performance of the system, and the key technologies of the block chain are selected and tested. In order to strengthen the Russian cross-border e-commerce logistics platform and promote the transformation and upgrading of foreign trade under the support of traditional manufacturing industry, we should break through the system mechanism, reduce the comprehensive cost and promote the industrialization of high and new technology. The comprehensive service platform for foreign trade is developed in an orderly way. Two should grasp the trend of the foreign trade development environment, make full use of the Internet, innovative design, lean production, cross-border business, block chain and other supply chain operation mode and technology to improve the foreign trade supply side structure; three, grasp the quality of enterprise, market, enterprise thinking and brand communication, follow the market law, and improve foreign trade Manageable level.

REFERENCES