

Application of Blockchain in Cross Border e-Commerce Payment

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Abstract: With the rapid development of global economic integration, cross-border e-commerce has become one of the main forms of international trade. China is a big manufacturing country with high quality and low price, and the development of e-commerce is at the leading level in the world, which also lays an important foundation for the development of cross-border e-commerce and effectively promotes the orderly rise of cross-border e-commerce in China. In cross-border e-commerce, payment mode plays a key role. The scientific application of blockchain technology can provide safe and reliable guarantee for cross-border e-commerce payment. In this paper, the application of cross-border e-commerce is discussed.

1. Introduction

The rapid development of economic globalization has led to more frequent and close exchanges of Global trade, and the rapid rise of cross-border e-commerce. The emergence of cross-border e-commerce has effectively solved the shortcomings of traditional cross-border trade, and has an important impact and significance on promoting the stable and good development of China's economy. However, the operation of cross-border e-commerce payment will be affected by many factors, which will directly affect the leasing effect of cross-border e-commerce payment. Therefore, it is necessary to conduct in-depth analysis on the design problems of cross-border e-commerce payment and scientifically apply blockchain technology to ensure the safe and reliable operation of cross-border e-commerce payment.

2. Overview of Blockchain Technology

As for the blockchain technology, decentralization has the most significant characteristics. Based on the data module obtained by encryption algorithm technology, the distributed node database platform is constructed. In the cross-border e-commerce payment, the scientific application of blockchain technology can effectively handle the trust execution problem based on intelligent cooperation, and also ensure the trust risk in the payment and settlement process. At the same time, blockchain technology can also deal with the ownership trust problem quickly and effectively based on asymmetric key algorithm. In view of this, blockchain technology can fully guarantee the objectivity, authenticity and independence of Zhang benzong's recorded information. At the same time, because blockchain technology has the characteristics of point-to-point transaction, shared account book and tamper proof, the blockchain technology also has the advantages of de credit, supporting collective maintenance, decentralization and database security and reliability, which can be effective To ensure that all the credit data generated by trading activities establish credit relationship, it is not necessary to base on easy subjects and intermediary agencies, so as to effectively save the credit cost involved in the transaction period. Therefore, it is not difficult to find that the scientific application of blockchain technology can simplify the payment process scientifically, ensure the good authenticity of cross-border e-commerce transactions, build a unified standard payment mode, realize the scientific optimization of financial credit reporting system, and ensure the healthy development of cross-border e-commerce.[1]

3. Application of Blockchain in Cross Border e-Commerce Payment

3.1 Simplify Payment Process and Improve Calculation Efficiency

With regard to cross-border e-commerce payment, the traditional trading environment is relatively complex and complicated, and various kinds of problems occur frequently, which makes businesses and consumers have to face unnecessary troubles. The scientific application of blockchain technology in payment system can optimize the payment environment, simplify the payment process scientifically and ensure the real improvement of calculation efficiency, which has very important application value. For the blockchain technology, it covers the intelligent contract module, which is conducive to businesses and consumers to freely choose specific transaction mode and time, and to ensure the synchronization of transaction behavior and payment behavior. In this way, it not only realizes the scientific optimization of payment process, but also effectively improves the payment efficiency of cross-border e-commerce, and ensures the safe flow of funds in the market. In addition, the scientific application of blockchain technology in cross-border e-commerce payment can effectively save the cost of third-party payment and provide reliable guarantee for the development of cross-border e-commerce.

3.2 Optimize Financial Credit Reporting System and Reduce Credit Risk

The scientific application of blockchain technology can realize the system optimization of payment process, so as to effectively reduce the credit risk faced by cross-border e-commerce payment. This is mainly because during the transaction, all the information provided by the user needs to be verified by the system. Only after the payment system makes specific confirmation on the trading goods and merchant information, and ensures that the protection of the blockchain consensus agreement is met, the transaction behavior can be allowed to hold. At the same time, the payment system can also be based on the intelligent contract, according to the content of the transaction to achieve rapid automatic generation of payment orders, and all the information involved in the process can be accurately recorded. All kinds of information recorded by blockchain technology are updated synchronously based on the transaction process, so that businesses can ensure the security of funds for selling goods, timely deliver goods purchased by consumers, and the payment system continues to update relevant information in a timely manner. If the transaction goods are confirmed and registered by the relevant departments, the payment system can make logistics certification for all kinds of information involved, so that consumers can timely and accurately understand the dynamic of purchasing goods. After the consumers confirm the receipt of the purchased goods, the payment system will authenticate the transaction behavior and confirm the establishment of the transaction process to ensure the transparency and authenticity of all kinds of information involved in the transaction process. In addition, the blockchain technology has the characteristics of database and distributed bookkeeping book, which can effectively solve the problems of insufficient credit, information asymmetry and lack of mutual trust, without the need for businesses and consumers to establish additional trust relationship, so as to ensure more secure transaction activities.[2]

3.3 Realize Point-to-Point Transaction and Prevent Payment Risk

The most significant advantage of blockchain technology is decentralization. Because blockchain technology does not need centralized agent, it is conducive to the effective point-to-point interaction between the two sides of the transaction, and ensures that the information exchange between the two sides of the transaction can realize large-scale, efficient and decentralized agent. Blockchain technology relies on the trust of digital signature to confirm the ownership. It mainly uses algorithms to solve the point-to-point trust problem during the transaction, that is, relying on the acceleration algorithm to ensure the authenticity and integrity of information. At the same time, relying on the intelligent contract mode, the trust can be enforced automatically, and the trust

traceability involved in the value transfer process can be relied on. The structure design is realized, and credit creation and trust building are carried out in the payment system based on consensus mathematical method. Because any intermediate node can not achieve delayed trading or concerns, it is necessary to ensure that the confidence of point-to-point transactions recorded in the shared ledger can be objective and true, and can not be tampered with. In addition, blockchain technology can also gain the trust of both parties, complete all cross-border e-commerce transactions in a timely manner, and ensure the security of funds and transaction information. In this way, we can effectively prevent and avoid the risks caused by the fluctuation of exchange rate and transaction delay, so as to improve the ability of coping with risks. At the same time, the scientific application of blockchain technology can also effectively eliminate all kinds of unreasonable transactions, prevent cross-border e-commerce from becoming an improper channel for illegal elements, and ensure the better and benign development of cross-border e-commerce.[3]

4. Conclusion

To sum up, cross-border e-commerce is based on the Internet, and transactions and payment activities are completed online. There are differences between cross-border e-commerce payment and domestic e-commerce payment. Cross border e-commerce payment is affected by many factors and faces greater security risks, which may cause huge economic losses. The application of blockchain technology to cross-border e-commerce payment has obvious advantages. In the future digital payment system, blockchain technology is bound to become the most valuable basic technical framework, and its application in cross-border e-commerce payment is bound to play a key role, providing security for cross-border e-commerce payment.

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