

Analysis of the Situation of Blockchain Credit Investigation and its Development

Wenqiang Xie

Guangdong University of Finance, Guangzhou 510521, China

Abstract

Blockchain technology was the first applied in the financial. Credit investigation serves as the foundation of the healthy development of the financial industry, and the application scenarios of blockchain in the field of credit investigation are also gradually increasing. Combining the technical characteristics of blockchain, applying it to the credit investigation can solve long-term problems. At present, the application of blockchain in the credit investigation has problems such as platform construction, rights protection, security risks and other problems. This paper aims to put forward the development prospect of blockchain credit investigation through the analysis of the research of blockchain credit investigation.

Keywords

Blockchain; Credit Investigation; Credit Society.

1. Situation of the Blockchain Credit Investigation

Blockchain is a distributed ledger using cryptography technology to add consensus confirmed blocks in chronological sequence. Its essence is the collection of computer technologies such as point-to-point transmission, consensus mechanism, time stamp, encryption algorithm, etc. It has the characteristics of decentralization, distrust, asymmetric encryption, and has great advantages for credit investigation agencies to solve the development bottleneck problem, and has a benign role in boosting the development of credit investigation market.

Credit information in the market is limited, and few people collect information directly from the source. Most of them are purchased or shared from the government information collection platform, which makes it difficult to verify the authenticity of the information. The consensus mechanism works so that the information provided by the access mechanism, or the nodes on the blockchain, can only be recorded after most nodes are confirmed. This effectively ensures the authenticity and consistency of credit information, thus improving the quality of data.

2. Problems of Blockchain Credit Investigation

2.1. The Problem of Standards of the Blockchain Credit Investigation Platform

Technical standards are the basis for the healthy development of an industry. As an emerging technology, the development prospect of blockchain has been widely recognized, but A unified technical standard has not yet been formed. At the end of 2016, Goldman Sachs Group withdrew as part of the alliance as one of the founding members of the R3 Blockchain Alliance, because of the suspected blockchain technology standards of the original system, and developed a new set of blockchain technology system.

Overall, the blockchain industry existing entrants of different scale, different purpose, more project prospects by rendering the raise or obtain investment, and some will blockchain credit platform construction and digital currency issued binding, and through the initial digital currency issued ICO (Initial Coin offering) for financing. However, there are great risks in ICO,

which leads to a large number of applied projects, full of hype concepts. However, there are not many projects really recognized by the society, and the regulatory authorities are not allowed to finance through ICO. Therefore, the construction of the blockchain credit investigation platform urgently requires the establishment of relevant technical rules and standards.

2.2. The Problem of Protection of the Rights and Interests

The biggest problem in the development of credit investigation is that the protection of the rights and interests of information subjects has not been properly solved, leading to the industry walking on the edge of laws and rules, which has a negative impact on the overall development of the industry. Blockchain credit although in the technical level of information subject privacy protection has made great progress, but in some information and information subject rights protection credit general rules there exist some conflict, such as bad information preservation period, information tamper, information subject objection and complaints, information subject key lost after recovery, etc., need to study from the technical level to ensure not conflict with national laws and regulations, and to ensure that information subject rights are effectively protected.

2.3. The Problem Development of Credit Investigation Agencies

The information confirmed through the blockchain platform can be recognized by the society, which is determined by the technical characteristics of the blockchain. However, in the early stage of development, it is far from enough for credit investigation agencies to rely only on the blockchain platform to obtain information, and these information can only be obtained by credit investigation agencies after the authorization of the information subject. On the one hand, credit investigation agencies need to obtain as much as possible authorization on the platform through competition; on the other hand, they need to obtain more comprehensive information from other channels offline through the platform, so as to provide more effective and complete information reference for information users.

At present, the participation of the credit investigation agencies of the established blockchain credit investigation platform is not high, when the business homogenization of credit investigation agencies, especially enterprise credit investigation agencies, is very serious.

2.4. The Problem of Regulatory Barriers and Safety Risks

The decentralized operation mechanism of the business has weakened the control of the regulatory authorities. The technological progress makes the business operation hidden under the black box, making it difficult for the regulatory authorities to comprehensively supervise the related businesses in the traditional way. At the same time, the system operation also contains certain security risks. Although the underlying technology of blockchain has greatly improved the security level, it does not mean that it will not be attacked by hackers. The users password is lost or stolen, its related rights and interests are also difficult to be protected accordingly.

3. Suggestions for the Development of Blockchain Credit Investigation

3.1. Establish a Credit Information Sharing Mechanism with the Government as the Leadership

The government should strengthen the top-level design, actively explore the block chain technology applied to the specific practice of the credit industry, actively promote industry data chain, realize block chain and the real economy industry depth fusion development. The use of credit platform joint private credit enterprises to realize data connectivity and information sharing. Finally, to establish a complete personal credit system.

3.2. Encourage Market-Oriented Blockchain Technology Innovation

Enterprise innovation has become the main position of blockchain technology innovation. Ant Group takes blockchain technology as a core competitiveness, uses blockchain technology to implement more than 40 scenarios such as Sesame Credit, and has been able to support 1 billion accounts and achieve 100,000 cross-chain information processing capacity per second., Therefore, companies such as Sesame Credit and Tencent Credit should be encouraged to actively explore the innovation of blockchain technology and its application in the credit investigation.

3.3. Strengthen the Construction of Integrity Culture and Cooperate with the Construction of Social Credit System

Blockchain technology participates in the construction of social credit system from the perspective of technology, and the society should strengthen the construction of credit culture from the perspective of culture. Trust is closely related to culture. Trust comes from the "innate moral consensus", which is the product of the moral norms shared by the society, and it is most easily generated from the common values and cultures. Cultural rules may play a powerful role in jointly determining the level of trust or distrust of a certain society at a certain historical moment.

3.4. Strengthen Interdisciplinary Basic Research and Cultivate Blockchain Professionals

Interdisciplinary basic research on blockchain technology requires not only experts in computer science, but also a large number of in-depth research of experts in economics, sociology, anthropology, management, law and other humanities and social disciplines, so as to cope with the opportunities and challenges brought by blockchain technology. In addition, in the early stage of the development of blockchain technology, we should seize the commanding heights of innovation in this field, enhance the international voice, participate in the formulation of national standards, and accelerate the breakthrough of core technologies. All this need to raise blockchain professional and technical talents. In addition to setting up corresponding high-level talent training platforms in universities, relevant high-tech enterprises should also be encouraged to increase investment and research efforts.

References

- [1] Hao, G. (2020). From personality trust to algorithmic trust: Research on blockchain technology and social credit System construction. *Journal of Nanning Normal University (Philosophy and Social Sciences edition)*, 1, 126-136.
- [2] Wu, J. (2022). The high-quality development of China's credit investigation system needs to improve three capabilities. *Credit investigation*, 7, 1-5. 2022 (7): 166-170.
- [3] Shi, M.(2018). The application of blockchain technology in credit investigation Industry. *Credit investigation*, 2018, 36, 20-24.