

# Research on Financial Integration Based on Blockchain Technology

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**Abstract:** This paper believes that the Financial Sharing Mode based on blockchain technology can further optimize the processing process of accounting business based on the original traditional financial management system. By applying blockchain technology, the combination of blockchain technology and financial sharing mode has become a new financial management system based on the financial sharing mode of blockchain.

**Keyword:** Blockchain; Financial Sharing; Accounting Business

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## 1. Introduction

**A**s an emerging technology after the steam engine, power, and Internet, blockchain technology may become the core technology to be mastered next. At present, the main direction of financial management is still the mode of "Internet Plus Finance". However, there are some obvious deficiencies in the operation mode of "Internet Plus Finance," which are

mainly caused by the centralized mechanism of the financial management system. With the continuous development of economic globalization, the competition of the market economy is becoming more and more intense. The financial management system of enterprises needs to keep up with the development of information technology. Based on the traditional financial sharing mode, a decentralized database can be established by taking advantage of

the unique features of blockchain technology, such as decentralization, unforgeability, and traceability. Financial sharing mode based on blockchain technology can effectively prevent and reduce financial risks in accounting work, independent audit, and ensure data transparency and security. At present, the development direction of the accounting industry is gradually changing from the era of financial accounting to the era of management accounting. In the process of transformation, how blockchain technology will affect the development of the accounting industry will become an important direction to be studied and discussed in the industry.

## **2. Financial Sharing Mode and Blockchain**

### **2.1 The development of Financial Sharing Mode**

In the current market economy, the center of enterprise financial management has gradually shifted from financial accounting to management accounting. The separation of financial accounting and management accounting has become an inevitable trend. The development of the financial sharing mode will accelerate the separation of financial accounting and management accounting.

#### **(1) Advantages of Financial Sharing Mode**

Through effective resource integration and resource optimization, the financial shared service model avoids the phenomenon of idle resources in the traditional financial processing model. This method can save many human resources, reduce labor costs, and ensure the accuracy and reliability of operation. By clarifying the responsibilities of each person, it helps to evaluate the performance of employees. To ensure the enthusiasm of employees.

#### **(2) Disadvantages of Financial Sharing Mode**

First, separation of property and property. It is easy to break away from business and finance, making the integration of industry and finance more difficult.

Second, labor and company operating costs

may rise instead of fall. New technicians, new equipment, and the new operation mechanism will increase the cost of the company.

Third, the efficiency of business processing is low. When the scale of enterprise group is expanding, the financial management system will reduce the efficiency of business processing because of the tedious process.

Fourth, there are hidden dangers in the security of financial information. The information security of the Financial Shared Service Center has become an urgent problem.

### **2.2 Development of blockchain**

Nowadays, blockchain technology has gone through three stages, namely blockchain 1.0, blockchain 2.0, and blockchain 3.0. In the development stage of blockchain 1.0, the main content is programmable currency represented by bitcoin; in the development stage of blockchain 2.0, the main content is programmable finance based on blockchain; in the development stage of blockchain 3.0, the main content is the application of blockchain in other industries. Based on the research of blockchain 3.0, with the further development of blockchain technology, the Financial Sharing Mode Based on the blockchain can solve the credit problems existing in the accounting industry, re-establish the trust mechanism, and effectively improve the overall accounting industry to a particular extent Business processing efficiency.

### **2.3 Financial Sharing Mode Based on blockchain**

Unlike the traditional financial sharing mode, the financial sharing mode based on blockchain has its unique advantages. First, each node in the blockchain stores complete data according to the blockchain structure. It can be stored in several parts according to specific rules. Secondly, each node of blockchain storage is independent and has the same state, which relies on the consensus mechanism to ensure the consistency of storage, which protects the security of account data to a certain extent. In

this way, transaction costs will be greatly reduced, subjective judgment and other individual factors will also minimize the impact of data. The results of value measurement will be more equitable.

### 3. Case study

#### 3.1 Case introduction

In 2014, the Rubix platform of blockchain was established in Toronto, Canada, under the leadership of Deloitte. To meet the unique needs of the enterprise level blockchain system, the Rubix team improved Rubix core from the underlying protocol to Web3 API and developer tools so that developers can quickly and seamlessly design, develop and test blockchain applications. Rubix provides any tool needed to run an enterprise blockchain application, including a control panel, block browser, node monitor, contract editor. Smart contracts can be written in the browser and quickly deployed to the blockchain.

#### 3.2 Case Analysis

Rubix can be said to be a blockchain platform that goes out of the laboratory and goes into production in a real sense. Rubix not only ensures a high degree of access control and data privacy but also provides the possibility of supervision. However, there are some risks.

First, after the new blockchain technology is added, whether the new technicians and related equipment and operation mechanism will lead to a certain probability that the labor cost will rise instead of falling.

Second, when the internal accounting information system exchanges information with the external trading system, can the security and confidentiality of the process data information be absolutely secure.

The third risk is how to correct the original data in the transaction.

Fourth, there may be various subjective prob-

lems in the transaction process that are difficult to avoid, that is, the subjective operation of human factors, which needs further research and discussion in the industry and academia.

### 4. Conclusion

Through the application of blockchain technology, the combination of blockchain technology and financial sharing mode becomes the financial sharing mode based on blockchain. This new financial management system can better realize the integration of industry and finance, and effectively improve the security and reliability of data. Because the theoretical research on the combination of blockchain technology and financial sharing mode is still in the exploratory stage, the analysis of this paper only stays at the simple theoretical analysis level. Therefore, the research focus of the industry in the next step should focus on the combination of specific actual cases for further discussion and research.

In short, the application of financial sharing service mode based on blockchain technology in the accounting industry will help to improve some problems existing in the existing financial sharing service center. However, it still needs to be summarized and further explored in a large number of practices in the future to better improve the Financial Sharing Mode Based on blockchain technology and make full use of information technology For the convenience of the accounting industry, to complete the new changes in the accounting industry.

#### Reference

- [1] Hanson G. Research on the Improvement Approach of Blockchain to the Online Audit [J]. Fiscal Science, 2016 (10);
- [2] Zhong Wei, Jia Yingzi. Application prospect of blockchain technology in accounting [J]. Accounting friends. 2016 (17);