

# Research on Company's Financial Governance From the Perspective of Blockchain

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## ABSTRACT

Blockchain technology has been a hot topic in recent years. As a distributed accounting verification database, the idea of transparency, freedom, equality and win-win makes it become a new technology that people follow with interest. Most of the researches are focused on how Blockchain technology will be applied to the economic and financial field in the future, but there are few documents on how it will play the role in the financial field of companies. On the basis of expounding the impact of Blockchain technology upon the company, this paper focuses on the impact of Blockchain on the financial governance of the company. And meanwhile, it makes a study of the corresponding strategies that enterprises should take to cope with the reforms caused by the Blockchain on the financial governance of the company.

**Keywords:** blockchain, finance, corporate governance

## I. INTRODUCTION

As the social science and technology proceeds forward, human society has gradually entered the web 3.0 era. Since the brand new trading method and content brought by the Blockchain technology created by Satoshi Nakamoto, countries all over the world have focused on this new scientific and technological area. The birth of new technology will impact different sectors of society, and the business model will change accordingly. Let's first have a look at the past history of business model in China: from 1980-1990, such companies as Haier and CHANGHONG, relying on manufacturing, managed to achieve scale effect by producing sufficient quantities of goods; from 1995 to 2005, companies like Gome and Suning, strived to achieve maximum benefit demand mainly by integrating upstream and downstream resources through the distribution channel chains; from 2005 to 2015, such companies as Alibaba and JDcom, managed to meet customer specific needs to achieve profit purpose by focusing on user experience. In the future, enterprises will mainly build a decentralized business model on the basis of Blockchain technology, and strive to create a form of sharing economy, together with customers, suppliers and companies, to form a symbiotic organization. That is, based on the form of efficient cooperative organization between customer value creation and crossover value network, the members of the network can achieve a high level development that the single organization failed to be realized through inter-subjectivity, mutual exchange of

resources, value creation and profit sharing. While the new technology promote the social development, potential risks cannot be ignored. Most transactions in Blockchain technology use virtual currencies, and the value of these virtual currencies is not very stable. At present, the total value of the global digital currency has exceeded \$500 billion, the annual maximum amount of increase is about 35 times, the number of categories has increased to more than 40,000. Besides, the market value of different types of digital currencies varies greatly and the price fluctuation is obvious, which make people begin to question its reliability. For this reason, Facebook attempted to launch Libra, a kind of virtual encrypted currency, trying to build a simple global monetary and financial infrastructure to serve global users. If Libra can be popularized worldwide, it will further accelerate the process of promotion and popularization of Blockchain technology and Blockchain technology will certainly become the key point that is to be thought over and solved for all enterprises.

## II. THE IDEA OF BLOCKCHAIN AND ITS APPLICATION IN THE COMPANY

Blockchain originated from Bitcoin. In a paper entitled Bitcoin: A Point-To-Point Electronic Information System, authored by Satoshi Nakamoto, the framework theory of related technologies was elaborated. In the subsequent process from theory to practice, people gradually distracted their attention from Bitcoin itself to Blockchain technology, one of the

underlying technologies of bitcoin. The essence of Blockchain is a distributed accounting verification database, which can be encrypted by building consensus mechanism (The so-called consensus mechanism is similar to the establishment and governance mechanism in traditional enterprises) to ensure its security, and then through the intelligent contract (that is, the contract executed automatically), the block chain is constructed, so as to effectively solve the trust problem that has always existed in the Internet. [1] An asset (value) Internet will be formed through the Internet of Information in combination with the trust mechanism, which is different from the current mobile Internet. The current Internet is more like a kind of monetary transaction than a transaction of real assets. Based on Blockchain technology, assets can be linked and traded instantaneously on the Internet. Global assets are far larger than the existing capital market, so the promotion of Blockchain technology will certainly change the existing trading methods and content.

#### *A. The idea of Blockchain*

If technology wants to be kept in a long-term development, it must be guided by correct ideas, the same is true to the Blockchain technology. The idea of Blockchain is summed up as follows in general: transparency, freedom, equality and win-win. Transparency means that information on the Blockchain can be viewed by each participant. This is because socialized enterprises on the block chain set up a public account which can be viewed by every social man, so as to win the trust of the public. Freedom refers to the employee of the company can join or withdraw from the company freely without considering any contractual or legal constraints. Under the Blockchain technology, whether ordinary employees or shareholders, they are more like a movable employee or shareholder, who can enter and exit the company at any time. Equality means that every participant has the "equal right" to check accounts. In the traditional company, only a part of employees are allowed to check the accounts of the company. Based on the Blockchain technology, any participant has the right to access the accounts due to the existence of distributed account books. Win-win means that everyone can participate in the development of the company to create a win-win environment based on the Blockchain. The idea of block chain determines the future direction of the technology. That is, more attention is going to be paid on the interests of the majority, which not only allows the broad masses of the people participate in the decision of the company and understand the real development of the company, but also supervise the behavior of some executives of the company.

#### *B. Application of Blockchain in the company*

From the point of view of enterprise development, the embryonic form of early enterprises is mostly formed by the family as the unit, and then developed to be the company limited by shares, and then the nature of the company was completely changed. Among which the most representative one is the birth of the British East India Company. Institutional innovation not only subverts the concept of traditional enterprises in people's minds, but also further strengthens the market vitality and promotes economic development. At present, the emergence of Blockchain contributes to the building a new business model — socialized enterprises, in which Bitcoin and Ethereum is a typical representative. The essence of socialized enterprise is institutional innovation, which in turn promotes the progress of production relations and makes the distribution of each participant in the company more fair. Against the background of Blockchain, the main change is to reconstruct the cooperation mode of the enterprise and then change the enterprise pattern. First of all, as the cooperative and main body of the company, the digital account is different from the "legal person" and "natural person" in the traditional enterprise. Secondly, the Blockchain changes the traditional way of encouraging employees by wages, stock right and so on. On the contrast, it uses Token as an incentive tool, which refers to stock right, creditor's rights, right to use, accounts receivable and other corresponding types of assets. Thirdly, the Blockchain automates the contract through the intelligent contract, that is, the cooperative mechanism, and the enterprise also transforms into the intelligent organization accordingly. If intelligent contracts were widely used, economic division of labor would be further refined, extensive social cooperation will be realized, and eventually the distributed and autonomous organizations will be formed. The people in the organization are also able to work together equally and freely, and can get corresponding rewards. In a manner of speaking, socialized companies will bring higher efficiency than traditional companies in the context of Blockchain.

### **III. IMPACT OF BLOCKCHAIN ON COMPANY FINANCE GOVERNANCE**

The financial governance of a company, which takes the logic of financial rights as the starting point, is a series of formal or informal institutional arrangements through the rational allocation of financial rights within the enterprise. [2] Financial governance can be said to be a reflection of the financial rights of the company governance structure under the condition of clear property rights. The problems of company governance in traditional enterprises, such as the infringement of the interests of minority shareholders by large shareholders, will be reflected through the distribution

of financial rights, financial system or financial relations. Blockchain technology, while changing the enterprise model, is bound to change the status and authority of each financial governance body under the original structure of finance governance, and then change the financial management system of the company, and promote the realization of the sustainable development of the company.

*A. To be more rational in financial allocation of the management*

The balance of financial rights allocation in modern enterprises is an important work to ensure the financial governance of the company. The rational allocation of financial rights refers to a reasonable allocation and planning between the financial decision-making rights and the leadership of the enterprise. However, in most companies of China, most of the rights have been concentrated in the hands of leadership, which makes the financial decision-making rights and the executive rights cannot play a good role. It leads to such a situation that the company's resources cannot be fully utilized. While in socialized enterprises, the information of enterprises based on Blockchain technology is open, the changes and the establishment of the stock rights between management will be clearer, and the disposal of company resources will be more transparent. Such a change may not be accepted by all management. The reason is that the fuzziness of financial or stock rights make the trading purposes more hidden and additional benefits will be obtained. But this change is not saying that there is no benefit to the management. Socialized enterprises will clearly show the shares of other companies, make the pay performance evaluation system of the management more optimized and transparent, and improve the fairness of income distribution of the company. Besides, the management can better weigh the relationship between their payment and performance horizontally, and then encourage the management to work harder.

*B. Minority shareholders have the right of financial supervision*

In the traditional enterprise financial governance, the right of financial supervision is hold in the hands of internal and external rights organization, legal person and natural person who take up a certain position in the company governance, and the rights and interests of minority shareholders may be represented by independent directors. In this case, it is hard to guarantee the rights and interests of minority shareholders to be objective and not be infringed. What's more, the Blockchain voting system in socialized enterprises can make ordinary shareholders directly participate in the voting and election of the company and better take part in the financial governance of the company. In the meantime, it greatly

improves the enthusiasm of all shareholders to participate in the financial governance of the company, and solves the problems of the company's financial governance caused by proxy voting system.

*C. Contributing to the wealth maximization of the stakeholders*

Most traditional enterprises take "shareholder benefit maximization" as the goal, and insufficient attention is paid to the interests of other stakeholders. [3] Socialized enterprises pay more attention to the interests of different stakeholders, because the socialized enterprises chase after the decentralized business model. They not only regard the large shareholders as the owners of the company, but also keep in mind that all stakeholders are the important constitutes of the company. This requires that enterprises must aim at the wealth maximization of stakeholders and meet the interests of the majority of the enterprise. Blockchain technology makes enterprises more similar to public organizations, which is characterized by transparency and prudence in particular. So that the stakeholders of the enterprise can better understand the business situation and financial results, in order to protect their own interests from infringement.

*D. Changes in financial system*

Based on the relationship of the agency by agreement, the financial system should have such functions as financial rights allocation, supervision and control, decision optimization, and assessment and evaluation. But in the actual work, there are still some problems, such as unreasonable allocation of financial rights, loose supervision and control, poor decision-making and opaque assessment and evaluation. While under Blockchain technology, the financial allocation of socialized enterprises is clearer and more transparent, and the public can obtain relevant information resources through public channels; in term of supervision and control, the management is supervised by all stakeholders; in term of the decision optimization, the minority shareholders are also entitled to express their opinions; and in respect of the assessment and evaluation, the management can check the performance of other companies and compare the relationship between payment and performance horizontally. It can be seen that the financial system of socialized enterprises is not only a useless company document, it can be carried out and implemented actually.

*E. More reliable and transparent in financial information*

The financial information of the enterprise is an important basis for the financial governance of the enterprise, so ensuring the reliability of the financial

information is also an important measure for the enterprise to improve and perfect the financial management. However, there are quite a few issues in the transmission of financial information in listed companies, such as not transmitted timely or even forged financial information, which also brings great difficulties to the financial governance of enterprises. Under the Blockchain technology, socialized enterprise is different from traditional enterprise in the way of financial recording. Traditional companies generally set up financial account book and business account book respectively, the two kinds of accounts need to be regularly reconciled and corrected. On the basis of the Blockchain technology, reconciliation is not required because the original voucher record is locked and cannot be changed. According to the website of Ethereum, it can be seen that real-time transactions are equivalent to financial bookkeeping, which is recorded instantly, and can be consulted by the public. This reduces the cost both in public investment and company's supervision. Moreover, there is information delay of the reports that traditional companies disclose monthly, quarterly, semi-annually, annually, and the like. Based on the Blockchain technology, this kind of information delay will be resolved, the public only need to log on to the website to query the relevant information they required. On this basis, the financial information system solves the agency problem between management and shareholders to a great extent.

*F. To enhance the financial liquidity*

If traditional enterprises want to raise enough money, they probably resort to financial institutions to issue stocks or bonds, which may cause some transaction cost. On the contrast, on the basis of Blockchain technology, the financial intermediaries are unnecessarily needed. Social enterprises regard the Blockchain as the main platform for stock exchange or registration, which can greatly enhance the liquidity of stock exchange. Meanwhile, traditional stock exchange usually takes three trading days to move the shares from the seller to the buyer, during which the funds flow between the broker and the client. The result of it is that the company lose some occupying profit of partial funds. By contrast, Blockchain technology can skip intermediary companies and directly trade with customers, so it can reduce the cost of possession of various funds, loss of efficiency in the use of funds and other intermediate costs. Through the further enhancement of liquidity, investors' demand for stocks will be affected, and their investment strategy for stocks may also be changed accordingly, which make the high frequency of stock exchange may become a normal state.

#### **IV. RECOMMENDATIONS TO COPE WITH CHANGES IN FINANCIAL GOVERNANCE**

On the basis of the Blockchain technology, the socialized enterprises have changed the financial governance structure of the traditional enterprise, which will accordingly make the current financial system, financial posts and even the financial content changed. In view of this trend, enterprises should raise vigilance and make corresponding preparations for the changes brought by Blockchain technology.

*A. To establish an effective allocation mechanism of financial rights*

Based on the Blockchain technology, the traditional enterprises operating on shareholding system are transformed into socialized enterprises. The most prominent characteristic of socialized enterprises is its rapid transmission of information, the information transparency and the participation of the all people. As for the behavior of the management and their share composition, which are all transparent to the public. However, it is still necessary to establish a set of financial management mechanism that integrates rewards and punishments in socialized enterprises, so that the allocation of financial rights could be guaranteed within a corresponding system. Specifically speaking, the right allocation of the financial governance of the company can be extended from shareholders and management to minority shareholders and other stakeholders. Based on the different allocation of the financial rights among shareholders, it is able to improve the efficiency of the financial governance of the company.

*B. To focus on the interests of minority shareholders*

Compared with the joint-stock companies, socialized enterprises take lower costs and go faster in financing, and meanwhile, minority shareholders can also participate in the development planning of enterprises. In comparison, it is difficult for financial staff in traditional enterprises to pay attention to the interests of minority shareholders. The Blockchain technology makes it convenient for financial staff to know the investment information of minority shareholders. Although the proportion of minority shareholders in the company is not very high, the number of minority shareholders is very large. What's more, socialized enterprises are supposed to pay more attention to the comments from the public, because this will directly affect the amount of future financing of the company. Financial staff also should pay more attention to the interests of minority shareholders and their votes.

### *C. To enhance the financial internal control in enterprise*

No matter how the enterprise model changes, it is essential to establish a sound and effective financial internal control. First of all, we need to ensure that the financial internal control environment of enterprises is good. It can be done through such methods as improving the quality of the management of the listed company, evaluating the financial risk of the company accordingly, and focusing on improving the financial governance mechanism of the listed enterprise, and then forming an effective financial internal control management system. Secondly, it should strengthen the cooperative execution ability of the financial internal control department, and comprehensively use the all-round budget system, property preservation control and other related systems in the financial management of the company, so as to realize the effective control of the various business and matters of the company.

### *D. To improve the quality of the financial staff*

In view of the continuous development and progress of the science and technology in the future, the financial staff should not be limited to the financial affairs, but ought to have the relevant computer knowledge, let themselves become compound persons, that is, to be well-informed in finance plus IT. The development of Blockchain technology in the future will go from the current single chain to multi-chain collaboration, which can effectively change the information based on single chain into the information interconnection based on cross-chain. Such a change requires future financial staff to have a good understanding of its basic concept, so as to better grasp the distributed accounting technology. They not only need to master basic computer technology, but the corresponding management ability also needs to be further strengthened. All in all, if the financial staffs want to perform their own value under the transformation of the enterprise development model in the future, they need to consciously cultivate the blind zone of the relevant knowledge from now on, such as management knowledge, computer knowledge and so on.

## **V. CONCLUSION**

Driven by Blockchain technology, a great change will be taken place in the financial governance of the company. For instance, the financial information will be more transparent and reliable; the management and supervision to the management layer will be more effective; minority shareholders' participation in company governance will be more active; the interests of more stakeholders will get protected; and the cost in financing will be lower, etc. All these changes will affect the behavior of the management and other stakeholders related in the financial governance of the

company, which in turn may re-establish the financial governance structure of the company. Compared with enterprises operating on shareholding system, socialized enterprises are more in line with the expectations of the public, because the latter pay more attention to the vital interests of the broad masses of the people.

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