Reconstruction of Management Accounting with Blockchain Technology

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Abstract

Absrtact: with the characteristics of decentralization, security and independence, blockchain has broad application prospects in many fields. The ultimate purpose of management accounting is to improve the economic benefits of enterprises. Under the promotion of big data, enterprise financial accounting also began to transform towards the direction of management accounting, which is the inevitable development of the times. In the transformation and reconstruction of management accounting, blockchain plays an irreplaceable role. The following is a simple analysis of the transformation of management accounting based on the reconstruction of blockchain technology, so as to provide reference and suggestions for the application of blockchain technology in the transformation of management accounting.

Keywords

Blockchain; Management accounting; Transformation

Introduction

Accounting management is a branch of enterprise accounting, which has a parallel relationship with financial accounting. The purpose of management accounting is to provide the best decision for the enterprise, promote the improvement of enterprise management, and promote the improvement of enterprise economic benefit. Management accounting directly participates in the decision-making control by making plans, making decisions and controlling economic activities, which is a management content that enterprises attach great importance to. With the increasingly fierce market competition, under the promotion of big data, enterprise financial accounting begins to transform towards management accounting. The transformation of management accounting is not only the need of enterprise development, but also the inevitable trend of the development of the times. In the process of management accounting transformation, blockchain will play a huge role. Blockchain is a new underlying technology emerging in recent years, which has the characteristics of decentralization, openness, independence, security, anonymity and so on. It has broad application prospects in many fields. Blockchain distributed accounting method, with the advantages of high security, no tampering and decentralization, has attracted extensive attention in the accounting industry. Therefore, with the transformation of management accounting, blockchain technology is further concerned. According

to the characteristics of management accounting, its transformation can not be separated from the application of blockchain. The following is a simple analysis of the transformation of management accounting in the restructuring of blockchain technology.

Overview of Blockchain Technology

Blockchain, also known as distributed ledger technology, is to distribute multiple nodes in different regions, so as to realize network data storage, transmission, verification and other technologies. The system will record the data storage information to realize decentralization. The blockchain is composed of a limited number of blocks, and each block is connected according to the rule data structure. The data structure of each sub blockchain is consistent. Any change in the sub blockchain data structure will lead to the change of each blockchain. This is the so-called blockchain has traceability and non modifiability. The blockchain uses the initial block as the entry point, and uses the hash algorithm to manage the data input. In order to ensure the data security, the data in the sub blockchain changes, and finally ensures that the data cannot be changed. It is composed of block header, random number, version, timestamp, Merkel tree and block body. The block header consists of version, timestamp, random number and Merkel number.

The decentralized and high security data management technology of blockchain plays an important role in big data. The traditional financial management adopts centralized management. Once the data center fails, the system will not be able to use. The decentralized blockchain solves the problems in financial management. Its application in financial management will promote financial management..

The Performance of Management Accounting Transformation Reconstructed by Blockchain Technology

Because the characteristics of blockchain are not tamperable and irreversible, it makes information confidential and safe, point-to-point transaction transmission, decentralization, and reliable traceability of information. After the application of blockchain technology, the accounting method of enterprises begins to transform towards the distributed accounting mode of blockchain, which promotes the transformation of enterprise value chain management and supply chain management, promotes the transformation of enterprise information utilization, and promotes the transformation of accounting audit.

Transformation of distributed accounting method based on blockchain

At present, the principle of "original voucher bookkeeping voucher Sub Ledger general ledger general ledger" is implemented in accounting bookkeeping process in China. Among them, the general ledger is the reflection after all accounts are consolidated and summarized. It is the proof of all transactions and capital transactions of an enterprise, and the result performance of all accounting subjects after summary. Although this accounting method is a comprehensive reflection of enterprise transactions, the process is relatively cumbersome, and each link is easy to be tampered with blockchain technology has the advantage of decentralization. The application of blockchain technology for general ledger bookkeeping and recording transactions of each node based on time sequence can not only realize the transparency of transaction

information, but also effectively avoid the recording of repeated transaction information, and greatly simplify the accounting process of current enterprises. Therefore, after the application of blockchain technology, the enterprise accounting method began to transform towards the distributed accounting mode of blockchain. In the application of distributed bookkeeping based on blockchain, each node keeps accounts in the form of competition, and confirms the account information in real time. On the premise of ensuring the accuracy and uniformity of accounts, it also has the characteristics of non modifiable and no duplicate records. After bookkeeping, the system will automatically generate ledger and financial statements according to accounting standards for financial personnel to apply. The distributed accounting method based on blockchain effectively improves the security of accounting information and is not tampered with. Especially for listed companies, various drawbacks in the process of information disclosure, such as information tampering and destruction, can be effectively avoided, and the next lucky company can be avoided. At the same time, the distributed bookkeeping method based on blockchain also improves the timeliness of accounting information records. Under the automation of intelligent contract algorithm, financial statements will be automatically generated, which shortens the time of traditional report generation. In addition, the automatically generated financial statements have high transparency and traceability. Once the account information is recorded and published on the blockchain, thousands of copies of the information will be automatically backed up, and all nodes can see the information, so the transparency of the information is greatly improved. Once the information is recorded, it will not be tampered with, and the information can be traced back to the source once problems are found. Therefore, the distributed accounting method based on blockchain can effectively reduce the problems in information disclosure, increase the cost of accounting fraud, and improve the phenomenon of accounting information asymmetry.

Blockchain promotes the transformation of enterprise value chain management and supply chain management

Value chain is a series of activities in the process of enterprise value creation. At present, many enterprises have built value chain alliance, information sharing within the alliance. The application of blockchain technology can provide a platform for enterprises to realize information sharing, and place all the organisms in the value chain alliance on the blockchain nodes. Once the information in the blockchain is recorded and released, the organisms in the value chain can see the information in real time, which truly realizes the information sharing, improves the transparency of information, and reduces the risk caused by information asymmetry. At the same time, the application of blockchain can effectively reduce the redundant transaction cost in the supply chain, which is very beneficial for enterprises. At present, there are no real cases about blockchain promoting the transformation of value chain and supply chain management, but in theory, it is feasible, only needs time to promote.

Blockchain promotes the transformation of enterprise information utilization

Management accounting is to provide services for enterprises. The improvement of management accounting level is to help the senior management of enterprises make more reasonable and scientific decisions, so as to promote the development of enterprises. When making decisions, the top management of an enterprise needs to make use of the enterprise information and make a reasonable decision based on the comprehensive

balance of various information. Based on blockchain technology, various information utilization methods in enterprises will also be transformed, that is, all information in enterprises, such as finance, sales, customer management, performance and so on, will be recorded in the blockchain, and released in real time in the blockchain, subject to the supervision of various departments. Enterprise information can not only be effectively managed, but also promote the sharing of information in the enterprise, the speed of dissemination is also accelerated, effectively improving the utilization rate of enterprise information. For the top management of enterprises, facing such an efficient information utilization mode, they can not only understand the dynamic and working conditions of various departments of the enterprise in real time, but also master the operation situation of enterprises in an all-round way, and make more scientific and reasonable decisions based on the comprehensive, objective and true enterprise information, which is also beneficial to the long-term development of enterprises.

Blockchain promotes the transformation of accounting audit

Accounting audit is an objective and fair evaluation of the assets, profits and losses, liabilities and other conditions of an enterprise, and presents it in the form of audit reports. Accounting audit is the true and objective reflection of the assets and profits of an enterprise, and it is an independent work. In the information age, accounting and auditing work is also greatly affected, especially the application of blockchain technology can promote the restructuring of accounting audit structure and realize the transformation of accounting audit. At present, there are some problems in the current audit work, such as weak audit independence, low efficiency, single audit means and obvious traditional characteristics. The application of blockchain technology to the audit work can improve the transparency of various information in the audit work, reduce the risk factors in the audit, and at the same time, the audit process will be greatly simplified and the audit efficiency will be improved. Specifically, blockchain promotes the transformation of accounting and auditing mainly through the following aspects:

First, promote the transformation of auditors. Auditors are the main implementers of audit work, and the comprehensive quality of auditors directly affects the quality of audit work. With the advent of information age, traditional methods have been reformed to meet the development requirements of the information age. In the traditional accounting and auditing work, auditors mainly keep accounts by hand. In the information age, accounting computerization has changed the way of manual accounting. However, with the application of blockchain technology, auditors should transform and adapt to the development of blockchain technology application in time. In particular, the application of distributed accounting has the advantage of anti tampering. With the help of blockchain technology, auditors can invest more energy in complex transactions or internal control. Once the account is recorded based on the blockchain distributed bookkeeping, it will not be tampered with, and the authenticity of the transaction is clear at a glance, so it does not need to spend too much time and energy to verify the transaction. It can be said that blockchain technology promotes the transformation of audit work, which is also an impact on the audit industry. Only through the transformation of blockchain technology, mastering the application methods of advanced technology and improving their comprehensive quality and ability, can auditors not be unemployed and the efficiency of audit work will be improved.

Secondly, the construction of blockchain audit and supervision mechanism. As an emerging thing, the

application advantages of blockchain are obvious to all, so many industries have increased the application of blockchain. However, as a new thing, the current relevant laws and regulations are not perfect, especially in the blockchain accounting audit, we should also see its potential risks while seeing the application advantages brought by the blockchain. In the face of risks, we should strengthen the supervision of them, so we need a set of blockchain audit and supervision mechanism as a guarantee, which is currently lacking. Therefore, in the transformation of accounting audit, we should build a blockchain audit supervision mechanism, reasonably control the application of blockchain technology, find out the potential risks in its application, and take timely measures to improve. This is not only a problem that can not be ignored in the application of blockchain in the accounting and auditing industry, but also a key problem in the application of blockchain technology in the reconstruction of audit work.

Conclusion

As a new technology in the field of information technology, blockchain can be regarded as a shared database. The information stored in this database can not be tampered with and can be traced back. It can also reduce duplicate data records and has high security. Therefore, based on the advantages of blockchain, in recent years, in addition to being widely concerned in the financial field, many other fields and industries have also begun to pay attention to blockchain. It can be said that blockchain has broad application prospects. The release of China's "blockchain information service management regulations" has pushed the blockchain into the public vision and become the focus of current attention. Management accounting provides information for enterprise decision-making, and is an important way to improve the economic benefits of enterprises. In particular, the development of accounting technology is inseparable from the application of accounting management. However, the application of blockchain in the transformation of management accounting is more complex than that in the financial industry, and there is no reference experience, which needs to be explored step by step. Although the current application of blockchain in management accounting is not very mature, the role of blockchain in management accounting can not be ignored. Only by practicing and applying more can we truly play the real role of blockchain in the transformation of management accounting and promote the reconstruction of management accounting.

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