

Research on the Path of Reconstructing Accounting Information in the Era of 'Big Intelligence Moving Cloud'

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Abstract

With the popularization and deepening of big data and Internet technology, traditional accounting information can no longer meet the needs of enterprise decision-making, so there is an increasing demand for reconstructing accounting information. Therefore, based on analyzing the motivation of reconstructing accounting information, this paper proposes a reconstructing path in the era of the big wisdom cloud era, aiming to provide more effective support for enterprises to make financial decisions.

Keywords

Big Intelligence Moving Cloud; Accounting Information; Reconstruction Motivation.

1. Introduction

With the popularization and deepening of big data and Internet technology, the data information received by both enterprises and individuals is becoming more and more huge, and more and more different sources and types of data play an important role in enterprise decision making, so the traditional accounting information can no longer meet the needs of enterprise decision making, so there is a growing need to reconstruct accounting information. The concept of "big wisdom cloud era " was born and has been developed in various industries. The era of the "Big Smart Cloud" is mainly divided into financial sharing, social value-added, and demand-led. The advantage of financial sharing is that it can shorten the process of internal tax transactions, thus effectively ensuring capital security. Social value-added is based on reducing the company's operating costs and giving full play to the advantages of modern network technology. By continuously optimizing the company's internal financial information system, we can improve the management level of the internal financial information common service center, while value-added can enhance the company's social brand value by organically integrating the company's internal financial information system. Demand-led is the organic integration of the internal causes and external influences that affect the financial shared services of an enterprise, and the creation of humanized services for customers by focusing on the real needs of customers.

2. Literature Reference

Ying-Ying Mo (2017) argues that financial accounting is being transformed into management accounting in the era of big data, and this process must improve the use of information technology. Zhang Xincheng (2017) proposed that in the era of big data based on accounting process reengineering, the quality of financial reporting information will be improved in terms of non-monetary value information disclosure, real-time disclosure of operational dynamics, and management accounting and financial accounting toward integration. In his study on the challenges of big data on accounting and its response, Yu Xuefeng (2019) pointed out that in the context of big data technology, the analysis of massive accounting data can produce strong

processing power, filtering out some unimportant information and fully reflecting the screening ability of data. Xia Hongyu and Liu Yanyun (2021) expressed the view that big data technology has laid the technical foundation for the operation of the entire social data, which has triggered the reconfiguration of the traditional concepts of resources, and factors of production, values, relationships, and boundaries of enterprises. Through reading and summarizing the relevant literature, we found that most of the existing results stand on a theoretical perspective to discuss the reconstruction of accounting theory and the change of accounting information system, and lack of practice to support the evidence. On the other hand, the existing literature has a broader scope of research that stands on accounting information as a whole and is less relevant and relevant for today's times. Therefore, the research in this paper is based on the background of big data, which is advanced and more relevant to the current social and economic needs. Firstly, we start from the motivation of accounting information reorganization in the era of big data and then explore the paradigm and path of reorganization, aiming to provide more effective support for enterprises to make financial decisions.

3. The Motivation of the Reconstruction in the Era Background

3.1. Limitations of Traditional Accounting Information

In the company's operation, the financial information system plays two main roles: one is to support the financial work process and financial operation process, to enhance the company's financial business operation efficiency, and the other is to help business managers to make better investment decisions. However, because the traditional financial management system does not have a comprehensive grasp of the company's business processes, but is only based on the traditional financial model stays at the level of simple management of enterprise financial information, the comprehensive analysis of information systems is also relatively simple, and the effect of helping the enterprise manager to make investment decisions is also very limited, in the era of the big smart cloud shows several shortcomings, roughly divided into the following four areas:

(1) Simple information access. The traditional accounting information management system, based on the characteristics of modern accounting standards, only collects financial information that has an impact on the content of financial reports and usually does not record events that are not highly relevant to financial statement data and have a small impact on the financial statements, such as the acquisition of benefits from major customers, the fulfillment of cooperation agreements, changes in management personnel and adjustments to human resources activities. In addition, the traditional accounting information management is also very narrow to the enterprise has been carried out business data records, usually only focusing on recording money, time, quantity, and other items that can be counted, but not recording the location, reliability, implementation status, production capacity and other items that cannot be counted in numbers or money, cannot achieve a full range of the company's business development, which directly caused the traditional accounting in the enterprise's overall business data collection is insufficient.

(2) The lag in recording information in the report. When the service process is realized, the accountant records and enters the service information system according to the original documents, the actual balance of the account cannot be reflected in the account balance of the account, and the effect of effective management in the service business process is not achieved. Therefore, the method of post-entry causes a lag in the information of the traditional accounting information system and has a great impact on the information effectiveness of the entire network system. Influenced by the time lag of the information recorder, information report is difficult to realize and output in traditional accounting information system, and its report

content is more of analysis of historical data, which is poorly matched with the information needs of practical application.

(3) Non-uniform data specification[1]. In modern companies, the same business process usually contains a variety of departments, such as the sales organization includes the sales department for product sales and sales records, the inventory management department, and the logistics and distribution department for stock preparation, warehousing, and distribution, and the finance department for payment confirmation. To facilitate the business of each business department, it is usually necessary to set up a corresponding business management system. However, in the traditional accounting information management, each department system cannot unify the data management standard of the accounting information system, for example, the finance department takes whether it affects the financial statement as the statistical criterion, and the logistics department takes whether it can leave the warehouse as the data collection criterion. Information from the same industry enters the audit system under different standards, which is not conducive to the post-facto investigation and use of data.

3.2. The Impact of Big Data Technology on Accounting Information in the Era of Big Wisdom Cloud Era

(1) The information is easier to search and collect. Companies can collect information, such as structured or unstructured data, as needed, and parse that data to support the organization in making smart decisions. The advancement of big wisdom cloud era technology has enabled the company to have instant access to financial data in inactive financial markets and to obtain more accurate fair prices, making the application of fair prices possible.

(2) Enterprise data is more secure. Under the background of "big wisdom cloud era", blockchain technology also came into being. Blockchain technology means that before a customer publishes a company's transaction record, it must be unanimously reviewed by all nodes of the company to complete the publication, and after the disclosure of the company's entire company transaction record will not be arbitrarily modified by the customer, to ensure the absolute security of corporate information. Likewise, because blockchain technology uses asymmetric encryption technology, i.e., private and public keys are cryptographic, and only the corresponding public and private keys can be cracked, which greatly improves the security of enterprise data.

The ability to integrate and reshape accounting information. big wisdom cloud era integrates statistical, accounting, and intelligence information systems, financial accounting, and management accounting making accounting a data-rich information resource system, while its basic data is obtained from the accounting system of each grassroots organization, allowing these data to be released to form information resources with economic value and social value. Multiple Accounting Information Reconstruction Paths in Big wisdom cloud era.

4. Multiple Accounting Information Reconstruction Paths in Big wisdom cloud era

4.1. Integration and Reconstruction of Accounting Information Structure

Big data information is the "free" resource of today's society, and the mastery of big data information is the grasp of the initiative. However, in reality, when most enterprises use data, they find that the data is scattered in many systems and cannot be confirmed and shared with each other, resulting in inefficient data utilization. In order to solve the fragmented data situation, it is necessary to integrate and reshape the enterprise accounting information.

4.1.1. Enterprise Internal Information Integration Reconstruction

As a valuable asset for the development of enterprises, internal data directly affects the formulation of business decisions to grasp the lifeline of the market, including financial data obtained from financial reports, as well as non-financial data formed in the course of daily operations. The financial data can analyze the solvency, operational capability and profitability of the company,[2] while the non-financial data can provide reference for production and sales data and R&D data. Big data information integration platform can help enterprises turn their own data into a value, a future, and put the data to real use.

Enterprises realize the interface between accounting information database and internal personnel by granting financial personnel and managers of each department the authority to integrate information platform within the enterprise. When a non-authorized person operates on the platform, the system will automatically send a request message to the person in charge of the department where the operator is located, and the information can only be extracted after the person in charge agrees. Operators only need to query key terms in the search box of the platform, and the platform will push out the relevant information summary table to the operators according to the key words to achieve enterprise information sharing.

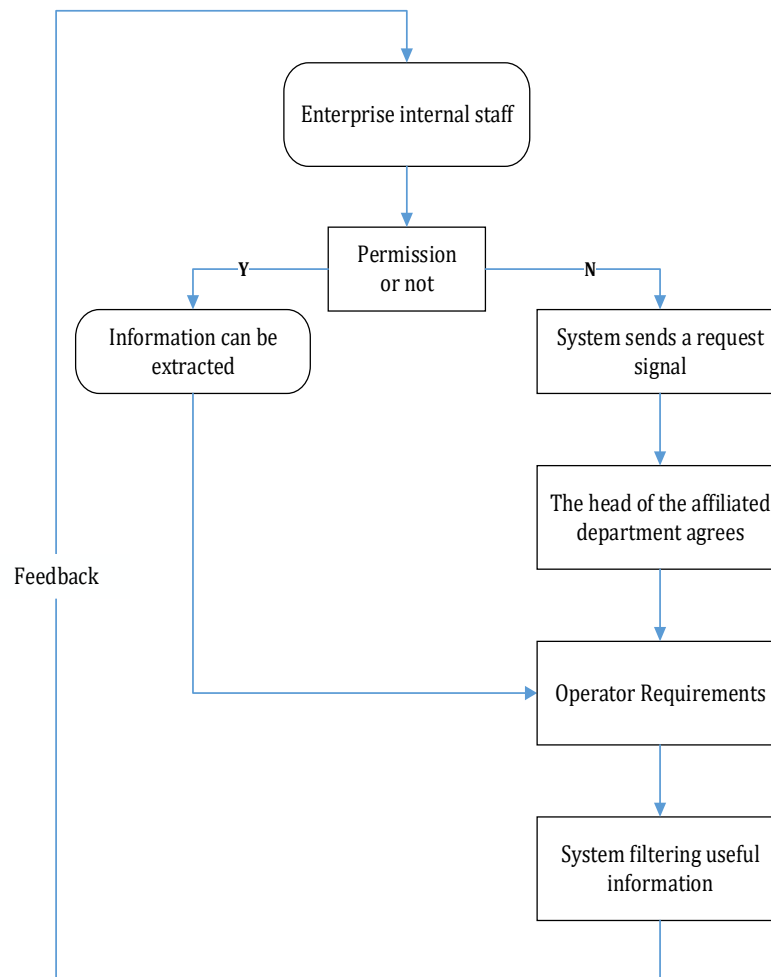


Figure 1. Enterprise internal information integration reconstruction

4.1.2. Enterprise External Information Integration Reconstruction

Within the intricate domestic environment, the system environment of enterprises is becoming more and more diversified, especially large enterprises with as few as a dozen systems and as many as hundreds of systems, so the connection of data becomes particularly critical. Today's

companies are data independent of each other, and integration has not yet occurred in the industry. If companies have the ability to connect data, they have the ability to maximize data. External information is divided into information about the same industry and upstream and downstream enterprises, both of which are key for enterprises to grasp market opportunities. The same industry level represents the average market level, and the use of industry data is pivotal for companies to make self-judgment. Enterprise decision-making emphasizes science and accuracy, and more importantly, decision-making based on facts and data. Only with the establishment of a complete competitor database, the analysis of competitors will not become a castle in the air and can be put into practice. [3] Therefore, it is the rational use of competitors' financial and business data and the comparison with the internal data that is the focus of the company to win. The first step to restructure accounting information from the upstream and downstream supply chain perspective is to clarify the closeness of the relationship between upstream and downstream enterprises and classify them according to the closeness, so that enterprises can clarify where to focus their analysis. Since the impact of upstream and downstream supply chains on enterprises is multi-faceted, if enterprises are evaluated according to uniform standards, they usually ignore certain factors, which not only increase the workload but also cause waste of human resources. Therefore, when analyzing upstream and downstream companies in the supply chain, the first step should be to classify and organize them to catch the key points. The finance department is responsible for setting the criteria, while the purchasing and sales departments should take up the data collection work. Like other common information sources, data extraction technology is used to extract financial and business data along the supply chain strip, and different enterprises are categorized and managed according to supply and sales, and databases are set up by enterprises and financial management personnel are given access rights. When the changes in the upstream and downstream strategies exceed the warning line and have a significant impact on the production, operation and sales of the enterprise, the analysis results should be fed back to the business department for timely strategic adjustment to avoid losses. In this way, by using the big data integration platform between multiple departments to form a mechanism of free data information transmission, reporting and mutual feedback, it ensures that the supply chain information data can be fully utilized in decision-making, thus realizing accounting information reconstruction.

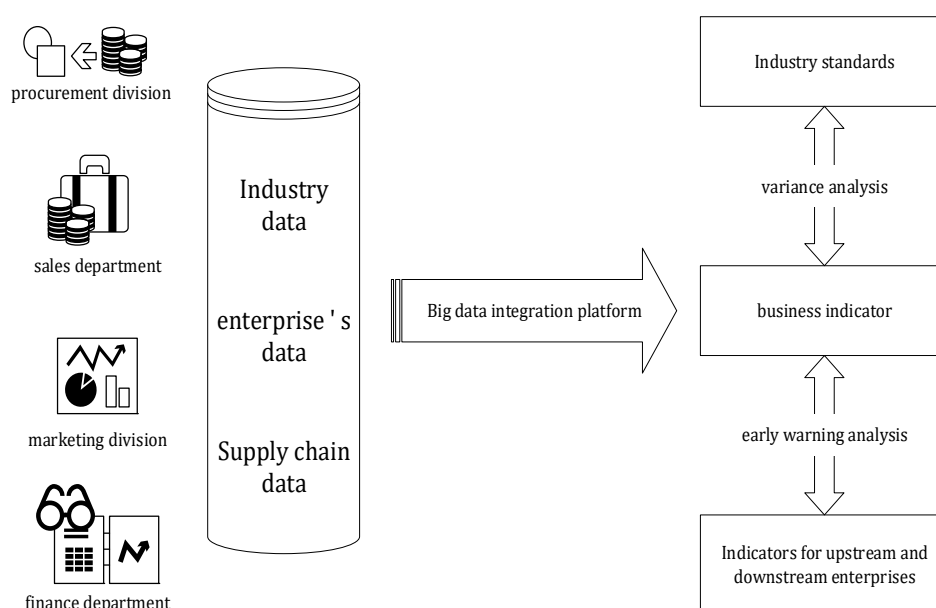


Figure 2. Enterprise external information integration reconstruction

4.2. Financial Report Remodeling

The purpose of financial accounting information reconstruction is to obtain decision-useful information to assist enterprises in decision making, and financial report reshaping can be the carrier of this result. Companies should clarify their development stage and industry status, combine internal and external data, and summarize the production and sales of relevant business units. Based on the aggregated results, the finance staff will integrate an analysis report of the entire business process for internal management to continuously optimize and improve management, so that the company can cut down on non-value-added operations and continuously improve profitable projects. At the same time, financial reporting is essential for business planning and overall forecasting as a vehicle for reconstructing accounting information. The emergence of technology in the era of the "Big Wisdom Cloud" allows accountants to forecast costs, profits and other indicators in advance, conduct in-depth analysis of business processes, and plan the next business direction in advance.

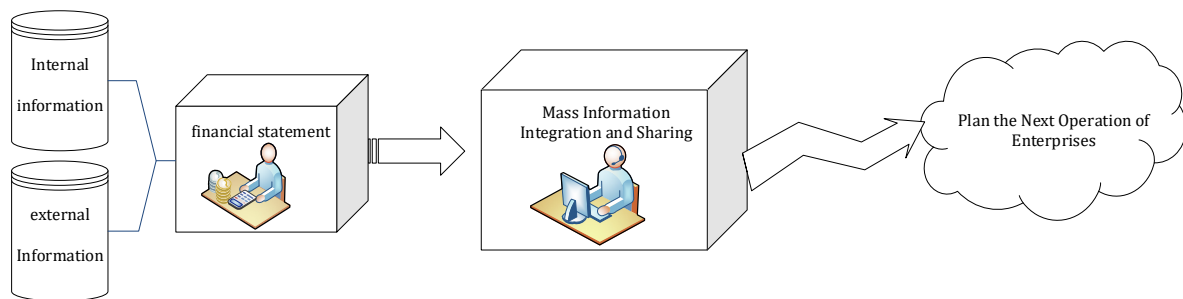


Figure 3. Financial report remodeling

4.3. Reconstruction of Basic Accounting Hypothesis

With the increasingly complex and diversified economic development and the advent of the big data era, the macro PEST environment has been changing for the accounting industry, and the basic accounting hypothesis has been affected. For performance appraisal, the proposed reconstruction of the basic accounting hypothesis is one of the main issues in the reconstruction of accounting information, and also has an important revolutionary significance for it.

4.3.1. Reconstruction of Accounting Entity Postulate

The traditional postulation of the accounting entity separates enterprises from each other, under certain conditions, without taking into account the relevance and connectedness of enterprise collaboration, the traditional postulation of the accounting entity, which does not fully adapt to the new situation. For the new environment, the performance appraisal subject is only in line with the postulation of the accounting entity and should be put forward from the postulation of serving the economic practice activities, to determine the status of the appraised accounting entity. It should go out of the previous concept of information use that highlights the independent and complete accounting entity, look at the problem from the viewpoint of connection, turn to the view of information use of the consortium with common economic interests in the era of big data, and turn from the traditional postulation of an independent accounting entity to an open accounting entity postulation. Regardless of whether it is a consortium of multiple departments, or multiple single enterprises, which may also form an accounting entity, the accounting entity postulation must expand the scope of the entity in due course, i.e. the criteria for judging and deciding the accounting entity is the performance assessment entity.

4.3.2. Reconstruction of Going-Concern Assumption

The traditional going-concern assumption lacks a study of the operations of one-time operating projects and will produce a rigid treatment of accounting practices with respect to current

economic activities. After the performance evaluation of a one-time project, the project will not generate any income or expenditure or cash flow. In the face of such a situation, the assumption should be changed from the continuity of operations to the immediacy of operations in order for the accounting records to more accurately reflect the business operations. Immediate operation assumes that there are no current assets, long-term assets, or fixed assets, i.e., there is no need to divide assets according to the time of use and purpose. There are also no current or long-term liabilities, i.e., no need to classify liabilities according to the timing of repayment. It only needs to amortize the value of assets to cost when they are acquired, emphasizes the immediacy of revenues and expenses, and uses the cash basis for performance evaluation.

4.3.3. Reconstruction of Accounting Installment Hypothesis

The traditional accounting installment hypothesis of regular financial reporting over a fixed accounting period cannot be fully applied to performance reviews.[4] The vast majority of companies will have at least one production and operating cycle in a year, so there must be a fiscal year to recognize the results of operations for that year. The accounting year is not conceptually equivalent to the natural year, and depending on the subject of many specific performance appraisals, the accounting period is not just a fixed period of one year, one quarter, or one month, but currently free to divide the accounting period according to the current situation, even across years, quarters, and months. The traditional accounting period does a one-size-fits-all treatment, requiring the accounting year to be equal to the natural year. This is not very reasonable for certain enterprises whose production and operation cycles span across years. For general enterprises, the appraisal can be carried out through the traditional accounting staging assumption. For performance appraisal subjects that carry out projects with different cycles, they should take the project cycle as the appraisal cycle and divide the accounting period according to the actual operation.[5]

4.3.4. Reconstruction of Currency Measurement Hypothesis

Traditional currency measurement only uses money to reflect the status of the enterprise, and is limited to a single fixed currency measurement tool, without taking into account that money only reflects economic flows and matters that can be valued and quantified. In a complex and diverse business environment, accounting measurement should be diversified, using different measurement tools and measurement units to provide information useful for decision making in order to achieve the ultimate purpose of accounting. In the current environment, there are still many matters that cannot be revealed quantitatively in currency terms in enterprises, and most of them require subjective judgment to assess, such as the quality of thinking of enterprise personnel, the level of management skills of managers, and the degree of social recognition of the enterprise's business culture. The company should adopt more effective and diversified accounting measurement assumptions to reflect data and textualization. At the same time, other valuable information should be added to the statements, especially for cultural value, human resource evaluation, big data value and other different aspects of information, to extend the content of financial reports and make them more effective. In recent years, the rise of digital money and electronic money has updated the traditional concept of money, and money has gradually changed from a practical quantifiable thing to a product of concepts. The change in the meaning of money has further strengthened the assumption of uniqueness of the local currency of account in accounting, and should add the assumptions related to non-monetary measurement to accounting measurement, and reconstruct them as "monetary and non-monetary measurement assumptions ".This will enable companies to better obtain effective accounting information.[6]

5. Conclusion

The modern global economic integration has deeply impacted all kinds of enterprises in China. In the face of such huge financial data, business data and operation data, enterprises can only analyze and utilize the accounting information in the era of the big wisdom cloud to improve their own development ability, care about the impact of the macro environment on business operations, and help enterprises improve decision making, improve operational efficiency, profit, and find and develop new markets. To improve operational efficiency and profit, and to find and develop new markets, enterprises can only stand in the tide of the market economy.

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