



Study on Countermeasures of Financial Accounting to Management Accounting Transformation Based on Big Data Technology

Xixiang Pan^{1*}, Jing Xu²

Jiangxi Tourism & Commerce Vocational college, Nanchang, Jiangxi, 330100, China¹

Jiangxi Tourism & Commerce Vocational college, Nanchang, Jiangxi, 330100, China²

**Corresponding author's e-mail: 465264254@qq.com¹*

**Corresponding author's e-mail: 7399603@qq.com²*

Abstract

With the rapid development of Internet technologies, such as the Internet and big data, the storage and collection of modern financial accounting has undergone great changes. At present, the cloud computing function of big data technology can provide technical support for enterprise financial accounting, big data technology in financial accounting application mainly includes data collection, data processing, data modeling, statistical analysis, data mining and other five aspects, including big data mining technology, develop financial data network in financial accounting, special group, gallery mining and other comprehensive operations. For the financial leapfrog to break through the traditional management mode, break through the user interest analysis, financial network behavior, etc. It is a very important part of management accounting. This paper mainly studies the transformation of financial accounting to management accounting in the era of big data and puts forward corresponding solution problems.

Keywords-*Big data; financial accounting; management accounting; transformation*

1. INTRODUCTION

Big data mainly refers to a large number of unstructured and semi-structured data created by people.^[1] When these data are analyzed and managed with traditional computer software tools, it often takes a long time, and the operation efficiency is relatively low. It is impossible to use traditional computer software for data analysis, data storage, data collection and other operations in a short time. Combined with the increasing progress of science and technology, many computer software have gradually failed to meet the needs of current financial accounting management, followed by the wide application of big data technology to better realize the transformation of financial accounting. Therefore, data processing and data analysis can obtain

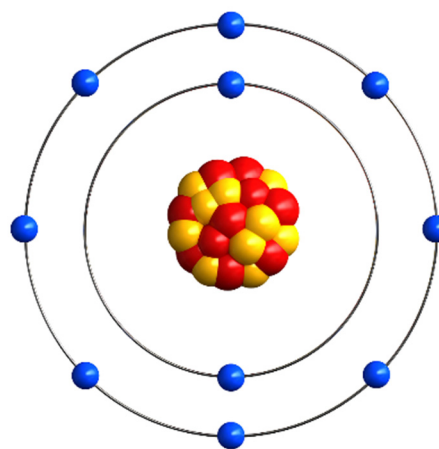
valuable data and return it to my information assets.^[2] The significance of big data technology is not to master a large amount of data information, but to carry out targeted analysis and processing according to people's needs. Combining big data mining technology with data mining technology can capture the needs and behaviors of users on major Internet websites and chat platforms according to users' browsing data and habits, Provide users with better services and save search time. The main characteristics of big data technology are large amount of data, fast speed, good diversity, low value density and good authenticity. Massive data mainly refers to the absolute amount of data, which determines the value and potential of the data to be considered. High speed refers to the speed of data analysis and transmission.

PC No.	Eigenvalue	Variance(%)	Total Variance(%)
1	0.0027	57.45	57.45
2	0.0016	34.04	91.49
3	0.0003	6.38	97.87
4	0.0001	2.13	100
5	0	0	100

Figure 1. Manage accounting base chart

Big data technology mainly includes data collection: in the life cycle of big data, data collection is the first link. According to the classification of the application system generating data by MapReduce, big data can be collected from four sources: management information system, web information system, physical information system and scientific information system experimental system. Data access: big data storage adopts different technical routes, which can be roughly divided into three categories. The first category mainly deals with large-scale structured data. The second category mainly deals with semi-structured and unstructured data.^[3] The third type is the hybrid TA infrastructure for processing structured and unstructured big data: cloud storage and distributed file storage. Data processing: different data sets collected may have different structures and patterns, such as files, XML trees, relational tables, etc., which are reflected in the heterogeneity of data. Multiple heterogeneous datasets need further integration or integration.^[4] collecting, sorting, cleaning and transforming data from different data sets will generate a new data set to provide a unified data view for subsequent query and analysis.

Statistical analysis: hypothesis test, significance test, analysis of variance, correlation analysis, t-test, analysis of variance, chi square analysis, partial correlation analysis, distance analysis, regression analysis and simple regression analysis, multiple regression analysis, stepwise regression, regression prediction and residual analysis, ridge regression, logistic regression analysis, curve estimation, factor analysis, cluster analysis Principal component analysis and factor analysis, fast clustering and clustering, discriminant analysis, correspondence analysis, multivariate correspondence analysis (optimal scale analysis) data mining: the existing data mining and machine learning technologies need to be improved, and new data mining technologies such as data network mining, specific group mining and graph mining are developed; Break through big data fusion technologies such as object-based data connection and similarity connection; Breakthrough areas - big data mining technologies such as user interest analysis, network behavior analysis and emotional semantic analysis. Model prediction: predictive modeling, machine learning, modeling and simulation.^[5] Results cloud computing, tag cloud, charts, etc.



● 10 Protons ● 10 Neutrons ● 10 Electrons
Figure 2. Schematic diagram of the financial and accounting management procedures

2. THE SPECIFIC APPLICATION OF BIG DATA TECHNOLOGY IN FINANCIAL ACCOUNTING

The traditional way of collecting financial information is mainly through books, statements and various journals. With the continuous development and change of the times, the ability of enterprises to receive information is also improving. At the same time, the competitiveness of enterprises is also expanding and developing rapidly. Enterprises need to take information collection as an important improvement way, Use big data mining technology to mine potential business value, use data model to build business development architecture, so that the development of enterprises can steadily improve and win big data technology, use data analysis to focus on several walking trend characteristics of data, combine relevant technologies with financial accounting, and give full play to the advantages of big data, so as to use modern technology to help enterprises formulate more professional More accurate industry planning, past and future forecasts bear forward-looking and strategic responsibilities for the development of the company, and realize the transformation from financial accounting to management accounting by continuously using the collection, analysis and processing functions of big data technology.

China's financial accounting centers still tend to show past economic transactions, and the transformation to management accounting can not only effectively predict the future business environment, but also help enterprises formulate a system for future development. In contrast, management accounting is more forward-looking, which can greatly reduce costs, affect the design, development and experience of enterprises, and effectively allocate resources.^[6] Due to the influence of technology, the traditional financial accounting has low efficiency and weak financial processing ability. If we use the previous

way of thinking to search and analyze a large amount of data information, since management accounting is the internal operation and management of the enterprise, from the perspective of management accounting, various organizations within the enterprise are interrelated. Management accounting is the creation of asset value through strategic implementation. The transformation from financial accounting to management accounting is to adapt to the current trend, The development of enterprises is to meet the requirements of scientific and technological level.^[7]

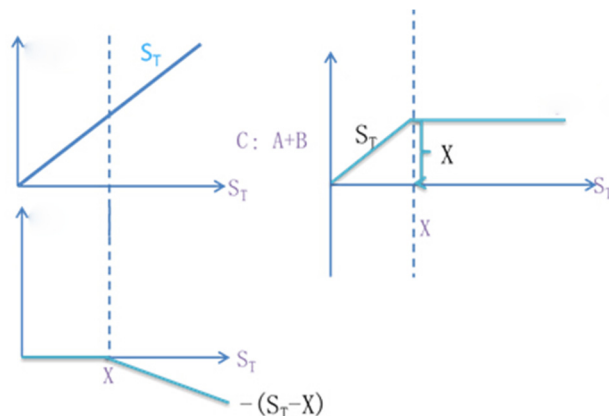


Figure 3. Coordinate chart of financial accounting calculation under big data technology

3. DEVELOPMENT DIRECTION OF FINANCIAL ACCOUNTING IN THE ERA OF BIG DATA

In the era of big data, the field of financial accounting increasingly relies on the massive data information provided by the big data platform, and pays more and more attention to data mining and processing. The impact of the data age on financial accounting can not be ignored. How to innovate financial management is one of the key points of current financial accounting research.^[8] The value of big data technology lies in its integration Process and summarize all kinds of data and information. The value of the data itself will generate new business value after integration, so that enterprises can use the processed data and information upy in the future competition process and competition, and be in a favorable position in the fierce market competition. After the data information is classified and processed by big data, the financial system will form a professional data management platform or operating system, Further strengthen data management.^[9] The financial data analysis under the traditional mode mainly focuses on the unprocessed data, but the current data changes greatly. Therefore, the traditional financial mode cannot meet the needs of modern data. Therefore, we must rely on the data management platform to use the data more skillfully and manage intelligently, In order to fully realize the application of big data technology in enterprise financial accounting.^[10]

With the increase of current financial management data and information, enterprises should be good at using science and technology for scientific and systematic management. On the one hand, it can greatly improve the efficiency of financial accounting, on the other hand, it can strengthen the application and development of modern technology, improve the level of financial management and promote the modernization of enterprise management.^[11] At the same time, big data has greatly changed the concept of modern financial accounting, constantly updated the management mode and processing method of financial accounting, and also adjusted the organizational structure of financial accounting in the development of enterprises, so that financial accounting played an important role in the development process of enterprises. Under the deep integration of information technology, big data technology and management accounting, the transformation of enterprises from financial accounting to management accounting has become an effective means to stimulate enterprise vitality, improve market competitiveness and enhance competitiveness, so as to promote the sustainable development of enterprises.^[12]

4. CONCLUSION

At present, the development of the world economy is expanding day by day, and enterprises are facing increasing pressure.^[13] Therefore, it is more necessary to speed up the application of data mining technology in financial accounting, improve the efficiency of accounting work, and make full use of data mining

technology for financial transformation and management, so as to lead to the transformation of enterprises and the development of enterprise financial accounting to management accounting. ^[14] Data mining technology collects different financial data sets, which may have different structures and patterns, such as files, XML trees, relational tables and so on. ^[15] For multiple heterogeneous data sets, it is necessary to further study their integrated processing or integrated processing, generate a new data set from different data sets, provide a unified data model for subsequent query and analysis, and make full use of the data mining technology of data collection to develop management accounting rapidly, Build a good accounting system model and financial system to meet the needs of modern financial development. ^[16]

ACKNOWLEDGEMENT

This paper is the phased result of Jiangxi Province Teaching Reform Project in 2020. The project is that research on "Financial Accounting Practice" course reform in higher vocational colleges, combination of "job, course, certificate and competition", under "1+X" certificate system. Item number: JXJG-20-55-2

REFERENCES

- [1] Huan Zuo. Risk Prevention of Accounting Informatization in the Age of Big Data [J]. China's collective economy, 2021 (31): 132-133.
- [2] Chunmiao Liu, Jiicai Chen. Innovative Countermeasures Analysis of Enterprise Financial Accounting Management Mode in Network Environment [J]. China collective Economy, 2021 (31): 136-137.
- [3] Jingyan Miao. The Application of Information Technology in Finance and Accounting [J]. China collective Economy, 2021 (31): 156-157.
- [4] Aitai Zhang. Problems facing the mutual integration of financial accounting and management accounting under the new situation [J]. China Market, 2021 (29): 171-172.
- [5] Naxin Chen. Study on Measures to Standardize Financial Accounting in Public Hospitals under the Government Accounting System [J]. Tax payment, 2021, 15 (29): 73-74.
- [6] Hongyan Luo. Brief Analysis of Enterprise Financial Accounting to Management Accounting under Big Data [J]. Tax payment, 2021, 15 (29): 85-86.
- [7] Hong Lu. Brief Analysis of Problems and Countermeasures in Enterprise Financial Accounting [J]. Tax payment, 2021, 15 (29): 129-130.
- [8] Xinxin Wang. Discuss the Integration of Enterprise Financial Accounting and Management Accounting under the new situation [J]. Tax payment, 2021, 15 (29): 147-148.
- [9] Xiaoyu Ma. Thinking on the Transformation of Financial Accounting to Management Accounting under the Background of Big Data [J]. Accounting of Chinese Enterprises, 2021 (10): 94-95.
- [10] Jing Cheng. The Transformation Problems and Countermeasures of Enterprise Financial Accounting to Management Accounting [J]. China collective Economy, 2021 (30): 54-55.
- [11] Yangyang Ning, Peipei Liu. Cloud Accounting Characteristics and Application Research in the Background of Big Data [J]. Business, 2021 (28): 65-66.
- [12] Wenhui Geng. Discussion on enterprise financial accounting transformation under the background of "Dazhi shift cloud" [J]. International Business Accounting, 2021 (11): 75-78.
- [13] Lili Wang. Current Situation Analysis and Countermeasures of Financial Accounting Transformation Management Accounting in Public Hospitals [J]. Finance, 2021 (24): 114-115.
- [14] Wenping Xu. Problems and Countermeasures in the Transformation of Financial Accounting to Management Accounting [J]. Investment and Entrepreneurship, 2021, 32 (13): 114-116.
- [15] Qundi Zhang. Research on Promoting Enterprise Financial Transformation Based on Management Accounting Theory [J]. Tax payment, 2021, 15 (16): 111-112.
- [16] Luan Zheng. Transformation of Financial Accounting to Management Accounting in Artificial Intelligence [J]. Finance, 2021 (15): 149-150.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

