# Application of Big Data and Cloud Computing in Enterprise Financial Management

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**Abstract:- The introduction of big data and cloud computing into enterprise financial management will help to promote the construction of financial management informatization and improve the quality and efficiency of enterprise financial management. This paper analyzes the advantages of big data and cloud computing, and discusses how to apply big data and cloud computing in the process of financial management to speed up the construction of financial management informatization.**

*Keyword:- Big Data; Cloud Computing; Corporate Finance; Management Applications.*

## I. INTRODUCTION

With the advent of the era of big data, the financial information management model has been greatly changed. With the acceleration of the informatization process, the traditional financial management model not only cannot meet the needs of enterprise development, but also hinders the development of enterprises. Therefore, the introduction of big data technology into enterprise financial management has become an inevitable demand for the development of the times. Enterprise financial management needs to choose appropriate big data or cloud computing methods according to its own situation, so as to improve the information construction of financial management and improve efficiency.

*A. The relationship between big data and cloud computing in enterprise financial management*

Big data technology can extract valuable data from massive financial data, which is more suitable for the characteristics of large amount, variety and reliability of data in financial management. The use of big data technology in financial management can help financial personnel filter out the required financial data from massive data in a short time, and greatly improve the efficiency of financial work.

Cloud computing technology, a mode of resource sharing based on the Internet, has the advantages of large capacity, strong stability and low cost. It can implement the processing of various programs through rational use of computer servers, or feedback the results in time. The user applies to the cloud platform, calls the relevant server and computer resources in time, and completes the analysis of the required data. The whole process is equivalent to the user using a supercomputer for data analysis, and its speed and accuracy can be imagined.

Big data and cloud computing interact and connect with each other, and depend on each other. The premise of using big data in practice is cloud computing, if there is no cloud computing, big data cannot be used. This is because big data itself is built on a cloud computing platform, and big data and cloud computing are interdependent and both are indispensable.

## II. MAIN PROBLEMS FACED BY ENTERPRISE FINANCIAL MANAGEMENT

*A. Poor communication between departments*

Under the centralized accounting model, professional accounting departments undertake the accounting work of the enterprise, but this arrangement will make the financial department doubt its own value. Finance and accounting are essentially the same type of work, and separate accounting departments can easily lead to rifts between departments.

Although this arrangement will reduce the workload of some financial staff, it will also allow some financial staff to have multiple jobs. As two departments, the internal accounting department and the financial department of the enterprise cannot communicate with each other, which will affect the long-term development of the enterprise.

*B. Staff lacks enthusiasm*

Under the centralized accounting mode of financial management, some enterprises have doubts about the centralized accounting of accounting, and cannot fully understand and master the relevant knowledge. As a result, some financial personnel cannot accept the centralized accounting system in the actual implementation, which affects the enthusiasm and attitude of work.

Once employees have conflicting emotions, it will hinder the entire work progress. No matter in the process of daily management or centralized accounting, they will be affected by negative emotions and have a negative working attitude, which will then affect the centralized financial accounting, which is not conducive to the standardization of corporate fund management. Sexual development affects the improvement of the efficiency of financial management.

*C. Poor financial management skills*

Financial management itself has a certain degree of professionalism and systematicness, so on the one hand, it has certain technical requirements for financial staff. On the other hand, for medical institutions, enterprises also have certain special requirements for financial management. Therefore, as managers, it is necessary to have good professional knowledge and qualified comprehensive quality to ensure the effective operation of financial work.

But at present, the comprehensive quality of enterprise managers needs to be improved. Especially in the era of big data, although most financial managers have certain professional abilities, they still lack innovation consciousness and enterprising spirit.

## III. THE SPECIFIC APPLICATION VALUE OF BIG DATA AND CLOUD COMPUTING IN ENTERPRISE FINANCIAL MANAGEMENT

In financial management, it records in detail the operation of funds in various economic activities within the enterprise, and is also an important data for decision makers to refer to. By introducing big data and cloud computing, the risk points in financial management can be discovered in time, and the quality of financial data processing can be improved. As far as the current actual situation is concerned, the value of big data and cloud computing in enterprise financial management is reflected in the following points.

### A. Comprehensive financial record

A large amount of financial data will be generated during the operation of modern enterprises. If traditional bills and paper models are used for management, omissions and losses are prone to occur. Through the rational use of big data and cloud computing, the informatization construction of financial data is realized, and the detailed recording of financial data is the basic work of financial management.

Through these financial data, we can judge the operation status of the enterprise, use big data to analyze the financial data of different departments, comprehensively grasp the profit and loss, income and expenditure points of the enterprise, understand the actual financial situation, reasonably allocate various resources, and successfully achieve the business goals of the enterprise , and then promote the healthy development of enterprises.

### B. Check financial data

The application of big data and cloud computing in enterprise financial management can check and check the financial data, find out the errors and loopholes in it, compare different data, and discover the similarities and differences of the same financial data in different years. Understand the content of financial data and ensure the accuracy of the results, which can use big data to identify data growth points and problems.

In addition, the use of big data and cloud computing can also regulate the behavior of financial personnel, complete financial audits unconsciously, and ensure the rapid development of the enterprise economy. When conducting audit work, you need to understand your own financial situation to ensure the accuracy of audit results. When carrying out corporate financial management, it is necessary to use the big data system to build a corporate financial database to effectively play a role and improve the efficiency of corporate financial work.

### C. Precise processing of relevant data

Compared with traditional manual accounting records, the application of big data and cloud computing significantly improves the flexibility of financial management. Reasonable use of network cloud computing and storage functions to analyze various financial data and improve the efficiency of financial data processing.

In the past, the lack of information technology in the financial management work resulted in the distortion of some financial data and the disconnection between financial decision-making and the actual situation. The use of big data and cloud computing technology can improve this situation and ensure the authenticity of financial data to the greatest extent.

## IV. APPLICATION ANALYSIS OF BIG DATA AND CLOUD COMPUTING IN ENTERPRISE FINANCIAL MANAGEMENT

### A. Improve the financial management system and strengthen communication between departments

The introduction of big data and cloud computing technology into enterprise financial management requires the improvement of the financial management system and the strengthening of communication and exchanges between various departments. At the same time, the content of financial management work is reasonably divided, and job responsibilities are clearly defined to avoid deviance. Let the positions that do not have intersections in the work supervise each other to ensure the safety of assets. In the development of an enterprise, although financial management belongs to a separate department, the cooperation of financial personnel, accountants and other departments and personnel is also required in the work process, so as to ensure the smooth development of the entire accounting process and the accuracy of the accounting results.

At this stage, many financial personnel in many enterprises have multiple roles at the same time. While there is a serious shortage of talents, it is in sharp contrast with the severe workload, which has a direct impact on the efficiency of enterprise financial management. Therefore, in actual work, as a financial department, under the current circumstances, it should take the initiative to help the financial department share work and tasks, and all employees of the financial department must cooperate with each other and cooperate with each other to ensure the smoothness of the entire accounting process. In addition, various departments should strengthen cooperation, cooperate with each other, and live in harmony, so as to provide assistance for the harmonious development of the entire enterprise. If the various departments are separated from each other, intrigue and intrigue with each other in their daily work, they cannot concentrate all their energy on their daily work, which will inevitably hinder the development of the enterprise. Therefore, it is necessary to strengthen the connection between various departments of the enterprise, communicate sincerely with each other, and work hard, in order to fully support the good operation of the entire enterprise.

*B. Improve the supervision and evaluation system and build a financial fund management system*

To use big data and cloud computing technology to carry out financial management work, it is necessary to do a good job in financial informatization construction, improve the existing financial analysis and evaluation system, and standardize financial management work to promote informatization construction. Enterprises need to formulate a fixed cycle according to the actual situation, comprehensively analyze financial data in this cycle, and formulate verification standards according to legal norms. When entering financial data, it is necessary to carefully check the original data to ensure the authenticity of the data and avoid accounting errors. In addition, it is necessary to improve the security of financial data, ensure the authenticity of data information, and avoid mistakes.

When using big data and cloud computing technology, it is necessary to take the actual development of the current enterprise as the premise, learn from other successful enterprises, and build a suitable fund management system. At the same time, the computer system is rationally used to achieve a comprehensive grasp of the operation of the enterprise's funds and to ensure the authenticity of the flow of funds.

*C. Stimulate employees' enthusiasm for work and improve the quality of financial accounting information*

First of all, the specific person in charge of each fund and the detailed right to use it are clearly stipulated. That is, each department or individual must bear the corresponding risks and responsibilities when using a certain amount of funds. Secondly, as a centralized accounting audit center, the reporting process for various audit funds must be fully detailed. Only after a strict audit can relevant departments have the right to use a certain fund. Thirdly, in the daily work process of the accounting center, Ange must abide by the relevant system requirements, and avoid and cancel as much as possible the capital expenditure that does not meet the requirements, regulations, or even unreasonable. In addition, the consumption of public funds or corruption must be resolutely put an end to and reported in a timely manner. Finally, according to the development of the enterprise and the performance of the employees, formulate a reasonable reward and punishment system and incentive mechanism, make a scientific and reasonable division of personal responsibilities, link the daily work performance of employees with their work performance, and formulate a complete assessment mechanism and clear indicators. Motivate employees to drive their enthusiasm for work.

Enterprises need to organize employees to conduct learning and skills training on a regular basis to help financial personnel have a comprehensive, in-depth and detailed understanding of the newly promulgated accounting system by the government, and can reasonably grasp every content of accounting terms. The newly promulgated accounting system integrates the dual functions of finance and budget in enterprise accounting, which are interrelated and relatively independent, and can clearly reflect the enterprise's financial information and budget execution capabilities. The financial accounting of enterprises follows the accrual system, while the budget accounting of enterprises follows the cash-based payment system. If the State Council stipulates otherwise, it shall be implemented in accordance with the regulations. The traditional enterprise accounting system follows the cash-based payment system. After the system reform, enterprises need to continuously strengthen the training of financial personnel to realize the concept of the parallel budget cash-based payment system based on the accrual system, so as to help the financial management of enterprises run smoothly.

## V. CONCLUSION

In short, the main content in the process of enterprise operation and development is financial management. By introducing big data and cloud computing technology, the effectiveness of financial management can be significantly improved. Enterprises should comprehensively consider their own situation, choose a suitable entry point, and realize comprehensive control of enterprise financial management through the establishment of a financial capital management system.

## REFERENCES

[1]. Li Weibo. Application of enterprise financial cloud accounting system under the background of big data [J]. Finance and Accounting Monthly, 2015 (31): 13–15.

[2]. Gao J. Research on the Corporate Financial Transformation with Big Data Technologies. International Journal of Progressive Sciences and Technologies. 2022;32(2):08-12. http://dx.doi.org/10.52155/ijpsat.v32.2.4316

[3]. Gao, Jun. (2022). Research on the Corporate Financial Transformation with Big Data Technologies. 32. 8-12. 10.52155/ijpsat.v32.2.4316.

[4]. Chen Zhong. Research on corporate financial management innovation under the background of big data [J]. International PR, 2019 (12): 195+197.

[5]. JUN GAO. (Volume. 7 Issue. , April 4 - 2022) "Comparison of Fintech Development between China and the United States.", International Journal of Innovative Science and Research Technology (IJISRT), www.ijisrt.com. ISSN - 2456-2165 , PP :- 1150-1155. https://doi.org/10.5281/zenodo.6563524

[6]. Sun Yanlei. On the transformation and upgrading path of corporate financial management from the perspective of big data [J]. Accounting for China Township and Township Enterprises, 2020 (12): 220–221.

[7]. Gao J. Analysis of Enterprise Financial Accounting Information Management from the Perspective of Big Data. International Journal of Science and Research (IJSR), https://www. ijsr. net/get_abstract. php.:1272-6. http://doi.org/10.21275/SR22514203358

[8]. Gao, Jun. (2022). Analysis of Enterprise Financial Accounting Information Management from the Perspective of Big Data. International Journal of Science and Research (IJSR). 11. 1272-1276. 10.21275/SR22514203358.

[9]. Liu Li. Research on the Intelligent Trend of Financial Shared Service Centers of Enterprise Groups [D]. Tianjin: Tianjin University of Science and Technology, 2019.

[10]. Gao, J. (2022). Analysis of the Financial Internal Control Strategies of SME Based on the Background of Big Data. Technium Social Sciences Journal, 32(1), 352–358. https://doi.org/10.47577/tssj.v32i1.6502

[11]. Li Yanuo. Research on the construction and application of intelligent financial system of Kute company [D]. Qingdao: Qingdao University, 2020.

[12]. Wang Lei. Research on coping strategies of corporate financial management under the background of big data [J]. Heilongjiang Social Sciences, 2016 (06): 75-77.