Research on the Innovation of University Financial Management System Based on Big Data Technology

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Abstract: Analyze the correlation between big data technology and university management accounting, summarize the impact of big data technology on university management accounting, point out the main path of big data technology into university management accounting, and finally combine the current big data technology in the university management accounting system The current situation of application in innovation, put forward four countermeasures and suggestions, for the reference of the accounting management departments of universities. This paper briefly introduces the connotation of "big data", analyzes its role in promoting financial reform, and combines the particularity of financial work in colleges and universities, and proposes to build a "big data" service sharing platform, improve the information level of financial management, and cultivate high-quality refined management measures for financial managers.

Keywords: University Finance, Financial Management, Big Data Technology

1. INTRODUCTION

The report of the Nineteenth National Congress of the Communist Party of China emphasized the need to "accelerate the construction of first-class universities and first-class disciplines and realize the connotative development of higher education". In 2018, the Ministry of Education proposed to adhere to "centering on the foundation", promote the "four regressions", and accelerate the construction of high-level undergraduate education. University financial management, as an important part of university management, has a very important position. First, the construction of financial management information under the background of big data will help contemporary universities integrate financial information related to university operations. Secondly, with the help of information technology, the unified processing of financial data of colleges and universities can be realized, and the efficiency of the processing process can be ensured, so that in the process of improving the financial management level of colleges and universities, the reliability and effectiveness of financial data can be fully guaranteed, and then it can be used for colleges and universities. The leadership provides solid financial data support.

Build a "big data" service sharing platform. The realization of "big data" services needs to break the data segmentation between various business processes and departments, and realize the sharing, analysis, and processing of massive information. As a gathering place for high-end talents, colleges and universities should actively use their own talent advantages to build a "big data" service sharing platform. Big data is a renewable resource. With the help of big data, information value-added can be realized, and the massive information in university management accounting can be more fully applied and mined. At this stage, the application scenarios of big data in colleges and universities have shown a diversified development trend. Among them, financial data is widely used in the dynamic collection, processing, and transmission of information, which effectively improves the timeliness of accounting and other information.

At the same time, the in-depth intersection and integration of big data and university management has put forward higher requirements for the comprehensive quality of financial practitioners, requiring financial personnel to have strong information collection and mining capabilities, to improve the accuracy of financial forecasting, enhance the ability to resist financial risks. When implementing financial management work, some financial management personnel have a low professional level, which can easily lead to a weak foundation for financial management work and bury potential safety hazards. In addition, the social public welfare attributes of colleges and universities determine that economic benefits are not the main goal pursued by financial management in colleges and universities, and there is no high requirement for the professionalism of financial management. With the needs of college financial management information innovation and reform, traditional financial managers can only meet the work requirements through transformation and upgrading. To this end, financial managers should actively improve their financial literacy and professional ability to lay the foundation for the construction of financial management information.

Relevant statistical data show that the financial systems of quite a few colleges and universities exist independently, and there is a certain isolation between them and the campus network system. In other words, the financial information management system of colleges and universities is not organically combined with the school's teaching management system, personnel management system, asset management system, etc., and has changed from result-based analysis to process-based mining. For example, for scientific research the analysis of the use of funds should change the traditional situation of simply classifying and analyzing the income and use of funds for a certain period. Instead, it can combine data such as access channels, usage, and value analysis of scientific research funds with scientific research projects. Various documents, data, and materials generated during the implementation process are comprehensively analyzed, and the dynamic performance of the funds for the implementation of the scientific research project can be obtained at any time.

2. THE PROPOSED METHODOLOGY

2.1 Problems Existing in the Construction of Informatization of Financial Management in Colleges and Universities

The full application of big data technology in the feedback and performance evaluation process of financial management in colleges and universities will help to promote the improvement of the quality of management accounting budget preparation. For example, financial management personnel in colleges and universities can use big data technology to form a corresponding management evaluation model based on the fund usage status of each department in the college and department in the previous year and the budget preparation target for this year, and then issue a corresponding analysis report based on the model calculation results. For college decision-making reference. To strengthen the construction of financial management informatization, it is necessary to continuously enhance the awareness of financial management personnel in informatization construction. First, financial management personnel in colleges and universities must fully understand the importance of financial management information construction.

Financial management personnel should realize that the construction of financial management informatization is a prerequisite for improving the level of financial management in colleges and universities; systematically learning the knowledge of financial management informatization and proficiently applying information technology in financial management are important means to improve the efficiency of financial management. Philosophy and cognitive issues have always been the root of financial management informatization construction in colleges and universities. Therefore, before promoting the construction of financial management informatization, university leaders and accounting personnel need to strengthen their own cognition and improve their understanding of university informatization. Only in this way can colleges and universities concentrate their efforts and vigorously carry out informatization construction. In the meantime, the school should regularly organize leadership and accounting personnel to have a preliminary understanding of big data, and then hold exchange meetings, to achieve the purpose of "promoting development through exchanges", so that accounting personnel and university leadership can fully understand to the advantages of financial informatization.

From phased monthly reports to real-time reports, financial management information has a certain lag, and generally only phased monthly reports can be realized. With the continuous development and maturity of "big data" technology and the realization of shared service platforms, the financial statements of colleges and universities can be transformed into real-time reports with the help of professional management software, providing more accurate and timely support for colleges and universities' financial decision-making. If big data technology really wants to play a role in the management accounting of colleges and universities, colleges and universities must combine the existing network system operation status with intelligent software to build a management accounting network operation platform. Among them, the key to platform construction is how to realize the integration of different software functions and the sharing of data between different databases. After the platform is built, attention should also be paid to the realization of interoperability with other platforms of universities, and the dynamic adjustment of the platform building modules should be done in combination with the actual needs of the work. The construction of financial management informatization in colleges and universities is inseparable from the financial management team with high informatization literacy.

2.2 The impact of data technology on management accounting in colleges and universities

First, colleges and universities can meet the relevant requirements of financial management information construction under the background of big data by introducing information technology financial management talents. Secondly, colleges and universities should strengthen personnel training, improve the information technology level of in-service financial management personnel, ensure the smooth development of financial management information construction, and give full play to the role of financial management information construction. The wave of the current big data era can be said to refresh people's understanding of many things. Among them, the first thing that needs to be realized by the financial personnel and the leadership is that, compared with the traditional financial management system, although the information construction is a relatively complex systematic project, once it is completed, it will inevitably reduce the work of the financial personnel. and significantly improve the efficiency of financial management work.

In addition, this innovative financial management model is still in the process of continuous development, which can help colleges and universities transform more traditional financial management models and methods. Improve the information level of financial management. Information in the era of "big data" is growing explosively. "Big data" does not mean flooding of information, but effective extraction based on a large amount of information, which requires the use of the latest data information processing tools. To achieve refined financial management, it is necessary to continuously improve the information level of financial management. The construction of management accounting system in colleges and universities often requires a lot of data.

For example, data stored in the asset system such as network equipment, teaching infrastructure, and real estate; data stored in human resources for teachers' salaries, working years, tax payments, and social security, basic information, academic performance, and credit accumulation of college students are stored in the educational administration system. Because these data belong to different management systems, there is a phenomenon of mutual separation, which is not conducive to the exchange and sharing of management accounting data in the information environment. Under the background of big data, opportunities, and risks of financial management in colleges and universities coexist. With the continuous advancement of information technology, big data has laid the foundation for the high-quality development of financial management, but it also brings corresponding financial security risks. Financial security risks involve the leakage and misappropriation of data information. It is necessary to build an information security firewall in financial management and strengthen the awareness of financial management personnel to ensure the security of financial data information. If colleges and universities want to carry out the information construction of financial management, they must have a solid financial and accounting team as support.

Therefore, it is necessary for colleges and universities to strengthen the construction of the existing financial and

accounting teams, improve their ability to apply information technology, and improve their thinking and cognition, to "add bricks and tiles" to the construction of financial information in colleges and universities. Conversely, if conditions do not permit, colleges and universities can also appropriately hire comprehensive talents to give lectures at the school, to strengthen the construction of the accounting team. The cloud platform is a new data collection and analysis method, which is conducive to the processing and convenient storage of large-scale data. In addition, new information technologies such as the data-driven cross-border mode that integrates LBS and big data technology, efficient data retrieval, and historical arrest mode can all be considered for integration into the financial management system of universities to serve "big data" analysis.

3. CONCLUSION

In the context of big data, it is an inevitable requirement of the times for colleges and universities to accelerate the construction of financial management information. In the process of financial management informatization construction, financial management personnel in colleges and universities need to have advanced information technology concepts to promote the reform and innovation of financial management, colleges and universities need to build professional financial management teams to promote the transformation of financial intelligence and meet the challenges of financial management informatization. Contemporary colleges and universities should increase their understanding of it, and based on this, think about the problems that hinder the construction of financial management informatization in colleges and universities. Only in this way can we ensure that the financial management system of contemporary colleges and universities is in line with the contemporary development. Thereby promoting the degree of financial information construction in colleges and universities in my country, and then ensuring that the development of contemporary colleges and universities can meet the development trend of the big data era.

4. REFERENCES

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