

Exploration and Analysis on the Optimization Path of Financial Management in Colleges and Universities under the Background of Big Data

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Abstract: In the context of the growing development of the Internet, big data is gradually applied to all aspects of life, learning and work. The financial management of colleges and universities is often in the central position of various affairs of colleges and universities. It is the basis of various management activities and plays an important role in promoting the development of learning and teaching. The financial management of colleges and universities has also been greatly affected by the development of big data, and gradually changed from single bookkeeping to single accounting. At the same time, the development and application of big data also pose a higher challenge to the financial management of colleges and universities. Therefore, it is very important to study the optimization path of financial management of colleges and universities.

Keywords: Big Data; Colleges and Universities; Financial Management; Optimization Path

1. Introduction

With the continuous development of network technology and computer technology, the scale of data information is also expanding. Big data, as a typical symbol of the progress of contemporary computer technology, and plays an important role in our life by collecting, sorting, analyzing and using a large number of data, which is an indispensable part of our daily life. The financial management of colleges and universities is also facing innovation in data analysis, processing, optimization and other aspects. The application of data to the financial management of colleges and universities is the trend of social and economic development and progress. Therefore, how to achieve better and faster development of financial management, and promote the improvement of financial management efficiency in colleges and universities is an urgent issue to be solved.

2. The necessity of financial management path optimization in colleges and universities in the era of big data

2.1 The requirements of continuous economic development

With the continuous development of China's economy, the new market economic environment has higher requirements for financial management and financial personnel in various fields. Financial management has gradually changed from basic work such as budget, bookkeeping, reconciliation and accounting to senior management such as investment and financing, internal control and strategic management. Therefore, the whole society has a greater demand for high-quality financial personnel and the optimization of financial management. As the connecting point between the school and the society, colleges and universities are expanding the field of financial management. Therefore, improving the efficiency of financial management, cultivating financial management talents and optimizing the path of financial management can better adapt to the current economic development.

2.2 The promotion of financial management system reform in colleges and universities

In recent years, the scale, teaching and financial system of major colleges and universities have been continuously reformed, and a unified management system has been gradually established. The rights and

responsibilities of each responsibility subject are clear, the financial management work between colleges and universities has been scientifically and reasonably divided, and appropriate management authority has been divided at all levels of each department of colleges and universities. In order to adapt to the development speed of colleges and universities, better deal with the increasingly complex financial problems, and improve the efficiency of financial management, the financial management path of colleges and universities also needs to be continuously optimized.

3. Constraints of financial management in colleges and universities under the background of big data

3.1 Backward financial management consciousness

At present, the collection, processing and analysis system of financial information in colleges and universities is still not perfect and lack of advanced financial management consciousness. Some colleges and universities still use traditional bookkeeping and accounting methods and thinking, and do not analyze the data in place and grasp the availability of data well, resulting in the mismatch between finance and business. It has a profound impact on the financial management of colleges and universities in China, and hinders the process of work. At the same time, the financial management staff's awareness of the school's financial management is not advanced, so that they still carry out the management work step by step, and rarely have the consciousness to carry out innovation and reform.

3.2 The financial management system is not perfect

In the current information age, financial management has gradually entered the digital mode, and big data has been widely applied to the financial management system. The financial management mode of some colleges and universities has been implementing the traditional mode for a long time, which is lack of innovation and scientificity. There are still some problems, such as the financial management system is rigid, the rules are not perfect, and the process is not standardized.

4. The path of financial management optimization in colleges and universities under the big data environment

4.1 Establishing the concept of financial management under the background of big data

In the face of the continuous development of big data, the financial management staff of colleges and universities should consciously cultivate the awareness of financial management to keep pace with the times. By learning the latest financial management theories, we can establish a good idea and system for managing funds and assets, learn from the successful financial management experience and examples of other colleges and universities, and combine with the actual situation of our university, in order to actively optimize the path of financial management, and the application of big data and information technology should be promoted in time to ensure the scientific and rational development of financial management. We should constantly realize the importance of data information, the necessity of accurate big data application in financial management, and use big data to analyze, screen and process the financial information of colleges and universities, so as to carry out reasonable financial budget and formulation, improve the use efficiency of funds, and formulate relevant financial risk coping strategies. It can timely deal with various problems in the process of financial management, prevent the occurrence of financial risks, and control the adverse factors caused by big data, in order to ensure the matching of school finance and business, and the safety of funds and property.

4.2 Improving the financial management system

Institutional innovation is an important aspect of the optimization of financial management in colleges and universities. In the context of the current development of big data, it is very important to formulate and improve the corresponding financial management system. First of all, we should establish a scientific budget management mechanism, and build a financial budget reporting, auditing and distribution system among colleges and universities, so as to ensure that all departments and colleges at all levels can accurately and timely report the financial demand information, and uniformly approve and compare with the overall financial budget of the university. It can ensure the rationality of the funds reported by colleges and universities, uniformly distribute the funds, and improve the financial budget level and the effective utilization rate of funds in colleges and

universities. Secondly, by using big data analysis technology, we can supervise the financial allocation process in an all-round way, control the income and cost of scientific research funds, teaching funds, logistics funds and service funds in colleges and universities in real time, control the cost, increase the income, and promote the scientific, procedural and effective decision-making of financial management in colleges and universities. Finally, financial management risk assessment mechanism is established to control the use of school finance as a whole, strengthen the management and use ability of school financial department for various funds, and evaluate the internal management work reasonably on a regular basis, to formulate measures to prevent financial risks.

4.3 Improving the overall quality of management personnel

The use of big data for financial management in colleges and universities not only requires institutional change, but also requires managers to have certain financial analysis technology. Therefore, strengthening the cultivation of the comprehensive quality of financial management personnel in colleges and universities is another important measure to optimize the path of financial management. Through the combination of online and offline learning and training, colleges and universities can regularly organize financial personnel to conduct online lectures and offline training learning activities, invite well-known experts and scholars to give lectures, explain theories and lead financial personnel to carry out practical operation, in order to strengthen the theoretical basis accumulation and practical operation ability of financial department personnel, and cultivate professional financial management personnel for the application of financial big data. After the training, the school can formulate the assessment contents and procedures, and carry out the corresponding business assessment for the financial personnel to master the situation of the financial personnel, so as to plan the personnel, time and content of relearning according to the assessment results.

4.4 Integrating financial business process

At present, with the continuous development of information technology and the widespread use of information technology, the financial management mode and process in various fields are constantly updated, and the integration of financial and business management in colleges and universities has become a trend. Therefore, it is necessary to reform the financial management of colleges and universities, integrate the business on this basis, eliminate some unnecessary steps in combination with the actual situation, and simplify the process of financial management of colleges and universities. By establishing a perfect and orderly financial business integration process, and building a scientific fund application, audit and distribution process, checking and auditing with the relevant business reported by each college, and making accurate records of financial business, colleges and universities can ensure the accuracy and rationality of fund application, maximize the efficiency of financial management, and determine the effectiveness of the new management process to ensure that funds can be distributed to all grades of colleges in a timely manner.

5. Conclusion

Under the background of the rapid development of big data, the collection, processing and analysis of information is an important aspect of effective financial management. The financial management of colleges and universities is the basis of better education services, which needs to be optimized and reformed in practice. The application of big data in university financial management is both an opportunity and a challenge. In order to better improve the utilization rate of funds and grasp the advantages of the information age, universities need to optimize the path of financial management, establish a good sense of financial management, and optimize the financial management system, so as to constantly integrate the financial process, simplify the financial approval procedures, and train financial personnel.

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