Research on Financial Management Innovation and Practice of Administrative Institutions under Big Data

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Abstract. Administrative institutions are an important force in social development. With the advent of the era of big data, all walks of life are affected by them, including administrative institutions. Big data has the characteristics of diversification and fast change, it is faster and more accurate than traditional data, and is of great help to financial management. Therefore, in this situation, the financial management of public institutions must recognize their own problems and meet the challenges. This paper analyzes some problems existing in the financial management of administrative institutions under big data, and puts forward relevant strategies for financial management innovation of public institutions to further promote the development of public institutions.

Keywords: big data; administrative institutions; financial management; problems; innovation.

1. Introduction

In the 21st century, information technology is developing rapidly, and all kinds of data have begun to integrate big data, such as computer technology, internet technology, etc., and finally broke through the limitations and achieved a major turning point. More and more people are beginning to realize the importance of data information, and using big data can make a huge difference to the current work. Administrative institutions have a high status in society, they are different from ordinary units, they belong to non-profit organizations, and their operations are also open and service. Therefore, it is an inevitable demand to strengthen the use and innovation of big data in the financial management of administrative institutions, which can not only save time for institutions, but also increase returns.

2. Problems Existing in Financial Management of Administrative Institutions under Big Data

2.1 The Internal Control System is Imperfection

The financial management of administrative institutions is inseparable from internal control, which can help institutions to play their functions better.

In 2012, the financial department issued relevant regulations on the internal control system, which provided reference for administrative institutions.

However, the internal control system of most administrative institutions in China is still not perfect, and it is often difficult to deal with depreciation. The low utilization rate of assets leads to the loss of funds, especially in the era of big data, administrative institutions still use the internal control system of the past, and they have not integrated the means of informatization, which has hindered the function of administrative institutions.

2.2 Unscientific Budget Management

The core content of financial management of public institutions is budget management. In recent years, the comprehensive budget has been used in public institutions, which is intended to optimize the allocation of resources, rationally plan strategies, and improve the core competitiveness of public institutions. However, there are still many financial institutions in the financial management ignore the importance of the budget in its internal. The main performance is that the budget is not fully prepared, and it still stays at the most basic annual estimate, and finally the financial budget is in the
form. Secondly, the budget execution was not handled in accordance with strict procedures, which eventually led to over-expenditure in the project, which ultimately affected the development of the institution [1].

2.3 Lack of Disclosure and Security of Financial Information

Unlike ordinary enterprises, administrative institutions serve the people. They are essentially non-profit organizations that need to be supervised by the public. However, looking at the current public institutions, the consciousness is not high enough, and a sound supervision mechanism has not been established, there are still internal violations of the law and discipline, which affects the development of public institutions. At the same time, with the advent of the era of big data, financial management information faces greater risks, it is necessary to strengthen network security construction, improve technical means, ensure the security of financial information, and prevent information from being leaked.

2.4 The Quality of Financial Personnel Needs to be Improved

According to relevant statistics, the utilization rate of big data in administrative institutions is not high. In addition to the system is not sound, and the quality of financial staff is inseparable. The quality of financial personnel in public institutions is mainly reflected in three aspects. First of all, financial personnel do not have advanced concepts of financial management, rely too much on financial allocation in the process of work, and have no awareness of internal financial management, which leads to the stagnation of financial management. Secondly, the financial personnel have a low sense of innovation, mainly because they want to find a secure job, so they work with old ideas and don't know how to innovate. The most important point is that financial management is still relatively backward, they do not aware of the advantages brought by big data for financial management, so they still use traditional accounting system in financial management, which affects the further development of public institutions.

3. The Financial Management Innovation and Practice Strategy of Administrative Institutions under Big Data

3.1 Establishing and Improving the Internal Control System of Public Institutions

Integrate big data into the administrative institutions, establish an Internet platform, use the platform to understand the information of each department in a timely manner, and use it as one of the performance appraisal standards to strengthen the internal control of the institution. Firstly, institutions must strengthen their publicity on the internet and big data to make employees aware of the importance of big data. According to the actual situation of the unit, integrate big data internally and use big data to strengthen internal control to create a good internal control environment. Secondly, the risk early warning mechanism is also indispensable. The security of information in the era of big data needs to be further evaluated. Establishing a sound risk mechanism is conducive to timely monitoring the data information of the financial department and timely warning of overspending data. Handling the daily expenses of finance to ensure the internal operation. In addition, it is necessary to improve the evaluation and supervision mechanism of internal control of public institutions, and establish a special internal review department to inquire about the income and expenditure of each unit in a timely manner to prevent illegal personnel from diverting funds. Of course, after-the-fact supervision is also essential, and it is possible to further implement the whereabouts of funds and lay the foundation for the development of public institutions. Finally, it is necessary to link the internal control system with performance appraisal, so as to stimulate the enthusiasm of financial personnel, such as material encouragement and spiritual encouragement for excellent employees, so as to improve the enthusiasm of employees to participate in internal control work[2].
3.2 Integrating Big Data and Strengthening Budget Management of Public Institutions

The traditional budget method of public institutions is to estimate according to daily financial information. This estimation method has many drawbacks and is not accurate enough. With the advent of the era of big data, public institutions should change the traditional methods of budget management, rational use of internal data, such as the integration of information, the integration of the amount of special funds, the use of funds, etc. to establish a shared platform. Financial personnel and leaders can timely understand the flow of funds through the information sharing platform. Big data will also make systematic analysis based on the flow direction, and predict and decide the future prospects. This method reduces the error caused by manual estimation and makes the financial budget more scientific and reasonable.

3.3 Improving the Financial Security of the Era of Big Data

It is an inevitable requirement for administrative institutions to integrate information management in the process of development, which can improve the efficiency of financial management and ensure the quality of management. However, the integration of information in the era of big data will easily cause security problems, such as tampering with information, internal data stolen by illegal personnel and so on. Therefore, when a business unit integrates with big data, it must raise the level of information technology. First of all, we must choose software companies with high reliability and ability to cooperate, design software according to the specific conditions of the institution, sign a confidentiality agreement and hand over the internal financial management system to the software company personnel for regular maintenance, and solve the system use process in time. There are problems that reduce the platform error caused by the integration of informationization. Secondly, the financial information management system is upgraded regularly according to the specific conditions of the institution, and the existing loopholes are repaired in time to ensure the security of the financial information data. Of course, administrative institutions cannot ignore the prevention of network security. They can set up high level firewalls internally and adopt multiple levels of encryption measures to prevent hackers from invading and stealing data, which will affect the normal operation of institutions[3].

3.4 Build High-quality Financial Information Talents

Institutions should clearly understand the importance of financial management personnel to their own development, and improve the treatment of financial personnel in order to attract more high-quality and capable financial information talents, building a financial talent team. Secondly, it is necessary to strengthen the training and re-education of the recruited financial personnel to help the financial management personnel to understand the specific development of the institution and the internal financial situation, they can also find professional personnel to conduct regular lectures internally to improve the quality of financial management personnel, at the same time, it is necessary to strengthen the information level of financial personnel and facilitate the integration of big data into financial management. The network can establish networked teaching resources to ensure that financial management personnel can freely go online to learn in their leisure time, thereby improving the concept of financial management personnel and improving the informationization level of financial management personnel. In order to ensure that financial management personnel can take the initiative to study, they can carry out internal competition and improve the enthusiasm of financial staff. In addition, regular staffing is required to go outside for further training, so as to continuously improve the level of financial personnel, it is also essential to realize the value of self.
4. Conclusion

The advent of the era of big data brings challenges and opportunities to all walks of life. Only by firmly grasping can we realize our own innovation and development. As far as administrative institutions are concerned, they have their own particularity, it is also an inevitable requirement for integrating into big data. Institutions should fully recognize the characteristics of big data, grasp its advantages, and use it correctly in financial management, such as establishing a sound internal control system, strengthening the application of big data in budget management, and using reasonable methods to ensure financial data safety, and further improve the overall quality of financial personnel, in order to improve the level of informatization and achieve internal innovation and development.

References

[1]. Xuehong Mao. The impact of big data era on the financial management of administrative institutions and countermeasures[J]. Financial circles,2019(09):137.

[2]. Feng Shi. Application of Big Data in Financial Management of Administrative Institutions [J]. Business News,2019(03):131.

[3]. Bin Li. Research on financial management innovation and practice of administrative institutions under big data[J]. Chinese and foreign entrepreneurs,2019(11):65.