Application Research of Enterprise Cost Management and Supervision Mechanism Based on Big Data

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Abstract. Enterprises to carry out effective cost management, can increase revenue, reduce expenditure for enterprises and improve the competitiveness of enterprises in the market. This paper first explains the problems existing in enterprise cost management and supervision mechanism and the overview of enterprise cost control and big data system. At the same time, it discusses how Chinese enterprises should do a good job in cost management in the era of big data for readers' reference.

Keywords: Big Data, Cost Management, Supervision Mechanism, Comprehensive Budget

1. Introduction
With the development of information technology, it has been widely used in various industries. The traditional cost management and supervision mechanism of enterprises are not up to the development of the times and there are many problems to be solved urgently [1]. Through the use of big data technology, the enterprise can control the cost of a comprehensive budget, improve the enterprise's business mode, business decisions for the enterprise to lay a good foundation.

2. Problems existing in enterprise cost management and supervision mechanism

2.1. The cost management and supervision mechanism are more traditional
The concept of cost management adopted by Chinese enterprises is more traditional, which does not accord with the rapid development of market economy. China's market reform continues to deepen in the process of development, with the increase of various enterprises of the same type, the increase of competitive pressure of enterprises, and the increasingly fierce market competition. Some enterprises are still focusing on reducing the cost of production link in the production and operation process as the cost management work, ignoring the cost influencing factors other than products [2]. At the present stage, the goal of Chinese enterprises should be to strengthen brand publicity, cultivate enterprise culture, improve production technology and cultivate excellent talents, and carry out comprehensive cost management through the combination of internal and external environment.

2.2. The construction of cost management and supervision mechanism system is not perfect
Our country enterprise cost management organizational structure is not perfect, lead to the financial
department work is totally dependent on other departments, lost the financial dominance in the financial management in the administrative department, financial department in the process of preparation of cost budget, because of the lack of perfect financial management framework, the cost budget is not the whole department to participate in, and often occurs during execution shuffle stalling phenomenon between the department, enterprise financial management system is not sound and do not conform to the requirements, lead to a larger enterprise budget with actual deviation, bring the financial risks [3]. For some enterprises, budget overspending has become the norm, and fund misappropriation occurs frequently, leading to the basic non-essential internal cost budget of the enterprise, which easily leads to the rupture of the enterprise's capital anchor and has a serious impact on the enterprise's continuous operation.

2.3. Lack of comprehensive budget for cost management
Some enterprises in China do not carry out comprehensive cost budgeting in the process of cost management. The one-sided budgeting work leads to the lack of budget enforceability. The comprehensiveness of cost budgeting is not only reflected in the participation of the whole department, but also in all links. Enterprises need to expand the scope of cost budgeting so as to lay a good foundation for cost management and realize comprehensive cost management. But some businesses were not prepared for a comprehensive budget, leading to more problems during the budget process. Enterprises pay too much attention to the control of economic costs and pay less attention to the control of enterprise costs, resulting in the failure to achieve unified management of enterprise costs. At the same time, the detailed operation steps in the cost budget are not comprehensive, which leads to the expense not being carried out according to the time, leading to a large deviation between the actual expenditure and the budget.

3. Overview of enterprise cost control and big data system

3.1. Big data system provides enterprises with new technologies for cost control
For an enterprise, internal cost control plays an important role in improving the comprehensive competition of the enterprise, and all enterprises also regard cost control as the key link of internal operation and management of the enterprise. Now is a network era, the computer has achieved a comprehensive popularization in the enterprise, so in the computer technology developed today, how to combine the cost control of enterprises and computer technology has become one of the important topics of people's research. Computer network management is now a necessary means of cost control for enterprises. Practice has proved that these advanced computer technologies play an important role in enhancing the comprehensive competitiveness of enterprises. Enterprise resource planning is the big data system, the full name of the resource planning is the management of the enterprise all the resources to conduct a comprehensive, will be the integration of the resources of the variety of different levels, these resources including information, logistics, goods flow, and flow, etc., through the integration and control of these resources, finally control the cost of the enterprise, make enterprise to obtain the biggest benefit. From the perspective of the cost structure of modern enterprises, the enterprise cost includes three aspects: material, financial and human, which are exactly consistent with the big data system, and the core part of the big data system also includes these three aspects [4]. Now has entered the information age, information age in the enterprise cost control is more control of data, and the big data systems data control also happens to be the best, caught in the process of data analysis, the data sharing, and it is the inevitable requirement of the enterprise cost control, only has realized the data sharing of the information between different departments, is likely to be the biggest cost control. The computer technologies used in the big data system are all very advanced mainstream computer technologies, which are inevitable in the process of cost control. More importantly, these computer technologies are the best computer technologies for cost control. A typical example is kingdee software, which is often used in enterprise finance. This financial software perfectly integrates computer technology and enterprise management ideas to achieve the best financial cost control in
enterprise finance. In addition to its technical guarantee, big data system also has the characteristics of timeliness and real-time, both of which are important guarantees for the cost control of enterprises (FIG. 1 Big data technology is widely used).

3.2. Big data systems conform to the cost control of multiple structures
At present, most enterprises in our country have achieved very good development, but from the perspective of the development of enterprises in the initial stage, they all started from that single mode of production without exception. However, with the continuous improvement of the market and the intensification of competition among enterprises, enterprises have to improve from single production mode to mixed production mode. This improvement means that the products of enterprises expand from one type to multiple types, and then there will be mass production and small-batch production with multiple varieties in the production of products [5]. However, from the perspective of cost control, two different production modes bring great inconvenience to cost control. And the big data system just solves this difficult problem, completely in line with the enterprise's diversified operation. In addition, due to the current incentive competition in the market, traditional cost forecasting methods cannot cope with the rapid changes in the market, while the big data system can do a good job of cost forecasting due to the operation of advanced computer technology, which is conducive to the long-term development of enterprises (Figure 2 Role of big data in financial analysis).

4. Under the era of big data, how should Chinese enterprises do a good job in cost management

4.1. Establish a "complete cost management chain" for cost management business links by using the COST management IT system
The author believes that in the era of big data, Chinese enterprises can further solidify the concept of
cost management, realize the binding of enterprise affairs and cost management information system, and implement the whole-process management of enterprise cost and expenditure. Specifically, the enterprise first needs to establish a set of information system support platform related to cost management, and design the cost management quota and standard in the platform, and manage the daily cost of the enterprise through the cost management IT system. At the same time, enterprises should also make use of IT system to make cost management, contract management, financial management and other modules "seamless link". Each department of the enterprise can view the business and cost of its own department through the system platform. At the same time of data sharing, it can also facilitate the work and connection of various departments [6].

In the cost management, it is difficult to avoid risks. Aiming at the cost risk problem, it is suggested that Chinese enterprises should establish electronic approval process in the cost information system to improve the approval of business processes related to costs. Use cost information system to collect cost data, combine management authority and approval authority, and control the risk in cost management within the minimum range. After the approval of the cost business process, the approval results will be sent to the cost-related business system through the system. So as to achieve the best effect of enterprise cost management (Figure 3 Intelligent analysis of big data).

![Figure 3. Intelligent analysis of big data.](image)

4.2. "Continuous optimization" cost management IT system

In the era of big data, Chinese enterprises should not only use the cost management IT system to establish a complete cost management chain covering the business links of cost management, but also continue to optimize the "cost management IT system". First, when the system is dealing with cost accounting, comprehensive and detailed analysis of cost data should be carried out to complete the accumulation of system experience in cost knowledge and cost accounting. At the same time, these cost data and experience accumulation can be shared by all departments through the system, which is helpful to improve the overall cost management ability of the enterprise. In addition, cost management IT system can also enable enterprises to make horizontal and vertical comparison of cost data between different periods and different projects, so that enterprises can analyze their own cost control level more effectively and provide effective support for managers to make correct decisions. Second, enterprises should further enrich the cost accounting index and cost management authority index in the cost management information system, and strive to realize the analysis, control and monitoring of enterprise costs from more perspectives. At the same time, potential problems and risks in enterprise cost management should be analyzed and avoided in a timely manner to improve the level of cost control. Third, besides the daily cost management, the enterprise should establish the cost
responsibility system for all employees, combine the actual effect of cost management and the result of cost supervision with the work performance of all departments and employees of the enterprise, quantify the cost management assessment indicators, and develop incentive measures and reward and punishment mechanism.

4.3. The system should "accurately connect" the cost and financial data
In addition to the above measures, enterprises should also do a good job in the cost management information system cost and financial data accurate docking. Enterprises should input the payment voucher information into the financial system in the COST management IT system, so as to achieve the consistency of the cost data and financial data in the system, and also reduce the error rate. In addition, enterprises can also use the data export function in the cost management system, thus reducing the workload of enterprise manual reconciliation. Through the above work, financial personnel can gradually from filling in vouchers, registration ledger, check and other financial work extricate. Thus, more energy can be put into the field of management accounting, which is helpful for enterprises to improve operating efficiency and efficiency.

5. Conclusion
To sum up, in the process of enterprise cost management and supervision mechanism, the application of big data technology and the establishment of information platform can strengthen the cooperation among internal departments of enterprises, enhance the information exchange among internal departments of enterprises, and reduce the risk of enterprises' decision-making. At the same time, big data technology can improve the accuracy of enterprise information management, improve the efficiency of enterprise information management. Therefore, the enterprise cost management and supervision mechanism should make full use of big data technology to promote the enterprise to achieve sustainable development.

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