The Influence of the Big Data Era on the Financial Management of Small and Micro Enterprises and the Countermeasures

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Abstract
The advent of the era of big data has brought new challenges to the financial management of small and micro enterprises, and has also brought unprecedented opportunities and changes. This article is based on the analysis of the significance of big data for corporate financial management, taking the current situation of small and micro enterprise financial management as the starting point, in-depth analysis of the problems and opportunities in the era of big data, and put forward corresponding effective responses to the problems in a targeted manner. Measures to enhance the application of big data by small and micro enterprises.

Keywords
Big Data; Small and Micro Enterprises; Financial Management; Data Security.

1. Introduction
Small and micro enterprises occupy a certain position in China’s market economy and play an irreplaceable role in increasing employment, activating the market and improving people’s livelihood[1]. Following the establishment of the “Mass Entrepreneurship and Innovation” policy, the Administrative organ attaches great importance to the development of small and micro enterprises and provides support to small and micro enterprises in taxation and financing. The number of enterprises is increasing day by day. There are still some problems and shortcomings in the financial management of small and micro enterprises, which are not conducive to their development. Traditional financial management must follow the trend of the big data era and make changes. If small and micro enterprises want to gain a foothold in the market, they need to use the advantages of big data to strengthen their management and take effective measures against problems.


2.1. Improve the Management Level of Small and Micro Enterprises
The application of big data technology has liberated the redundant labor force of enterprises to a large extent, and promoted the optimization of resource allocation such as human resources. Unlike traditional methods, big data technology can use network information to classify these complex contents through Internet operations, which greatly expands the business, and the scope of managed data also enhances the company’s ability to effectively manage. By constructing a network information platform and a decision-making feedback system, we can grasp market trends in real time, and completely record customers’ basic information, development status, and attitude needs, which facilitates corporate management and decision-making, and improves the efficiency of corporate management. In the era of large amounts of financial data, various budget decisions rely more and more on data and analysis, rather than experience and intuition. The empirical budget decision will be transformed into a budget.
decision, and the budget decision will be more timely and accurate. Financial management decision-making is inseparable from the support of data resources. When promulgating financial rules, the analysis and sorting of big data, through exploring the correlation between data, find the laws and rules hidden behind the data, and transform the analysis results of data processing into decision-making opinions, which can provide leaders with effective The basis for decision-making [2].

2.2. **Provide Accurate Data Analysis Platform for Small and Micro Enterprises**

At present, the operating and development system tools on the market are the source system of the indispensable reference basis in the implementation of various types of enterprise management. After years of mature development, modern professional tools to provide big data platform analysis have unique characteristics, regardless of the specific data. There have been qualitative leaps in the coverage and accuracy of data content. To better realize the simplification of complex data, data analysis is one of the content of a very difficult management module with very high complexity. Especially before making major decisions, companies will inevitably conduct systematic and complete data analysis, which lays the foundation for the increase in the difficulty of data analysis. Modern well-known big data platform analysis tools can be implemented well, and the presentation of complex data is ensured by the aggregation of complex data. The simplification, on the one hand, can better meet the research needs of managers, and on the other hand, it can better present the implementation of data management, which obviously can provide a stronger and valuable guarantee for the scope of data use and targeted development. In addition, precision and efficiency, and high efficiency of comprehensive analysis are also characteristics of the data analysis platform. Through years of research and development and systematic improvement of big data platform analysis tools, relying on complete system equipment to ensure more accurate implementation of data analysis, especially for data analysis and key points. The development of SMEs can better realize the high-efficiency implementation by relying on the internal system, and the faster and more accurate data presentation can obviously provide a more efficient guarantee for the management and development of small and micro enterprises.

2.3. **Improve the Efficiency of Financial Management**

With the advent of the era of big data, the amount of information that can be brought to companies continues to increase, so that people engaged in financial work can stand in a broader and comprehensive position to achieve control of each income and expenditure. The advent of the big data era has provided considerable convenience for financial management, freeing financial personnel from tedious tasks such as expense reimbursement, capital operation and accounting [3], focusing on strengthening corporate financial management, formulating strict financial management plans, and making financial work more rigorously in the enterprise and gradually improve the overall quality of financial work.

2.4. **Improve the Risk Management and Control Capabilities of Small and Micro Enterprises**

Financial management risk is the accurate prediction and control of the financial management risk of small and micro enterprises. In the context of the era of big data, techniques such as statistical knowledge and data analysis can be used to avoid risks. Big data financial risk management has certain tangible value, but also intangible value. Through the analysis of many fragmentary data through big data, the universal characteristics of risk events can be found, and this characteristic can be used to predict and alert the risk [4]. The significance of the existence of big data is to remind us of what may be problematic in the discovery of risks. Of course, it is only the analysis result of big data, and there is no inevitable causal connection. When events have different risk levels, you can also consider using big data to classify the risk
levels to adopt different solutions to ensure strict control of high risks and low cost to solve small risks.


3.1. Weak Financial Management Awareness
Consciousness guides behavior, and small and micro enterprises have very weak financial management awareness, and they often lack a sound financial management system. Although some local Administrative organ departments require small and micro enterprises to hire professional accounting companies for accounting and financial management, they often react perfunctorily and negatively [5]. Some small and micro companies even exclude interviewees and prevent them from accessing real corporate financial information. There are also some small and medium-sized enterprises that lack attention to the application of big data technology and miss the opportunity to use big data to solve financial management problems. Whether it is enterprise staff or managers who do not realize the role of efficient financial management in promoting enterprise development, the result is not conducive to the development of small and micro enterprises.

3.2. Incomplete Informatization Construction
Traditional small and micro enterprises have not responded positively to changes in accounting policies, insufficient capital investment, and immature computer information technology, leading to some problems in their management information construction, so that they cannot link the characteristics of data with relevant information. It is not conducive to the prediction and decision-making of enterprises, and increases the hidden dangers of financial management. Unable to take advantage of the advantages of big data information, and subject to various internal and external restrictions, is still too far away from scientific financial management, and unable to keep up with the information age, it is difficult to survive in market competition.

3.3. Poor Information Sharing
Thanks to the era of big data, companies have become closely connected and gradually become a whole. Many small and micro enterprises lack the motivation to innovate. They think that they are small enterprises and have not considered the benefits of good financial management. The most important point is the poor information sharing between enterprises [6], which may be due to small enterprises. It is true that micro-enterprises cannot afford the losses caused by information leakage, provided that they confuse some basic information and commercial secrets; still lack professional knowledge; it may also be difficult to distinguish the authenticity of the information; or there may be problems such as information security. The lack of information will reduce the efficiency and effectiveness of financial management decision-making. Moreover, within the enterprise, various departments work in isolation, and the inability to share data and the conclusions derived from the analysis of the data between departments will affect them to give informed and appropriate decisions within the time setting.

3.4. Information Security Issues
Financial big data is like a double-edged sword. The accuracy is generally low, the amount of information is also large, and the frequency of information often changes. However, from the current situation, the “big data” theory generally relies on data collection. Data quality cannot be guaranteed, but the accuracy of financial data determines the decision-making quality of unit leaders and financial managers. Due to the problems of the network system itself, the hidden dangers caused by human factors, the hidden dangers of hackers attacking the computer network, the hidden dangers of network viruses, etc. [7], and the lack of recognition of the
authenticity of big data financial information, information distortion may occur, Decision-making errors and other issues.

3.5. Lack of Big Data Technical Talents in Small and Micro Enterprises
Talents are the main and decisive force in the development of science and technology. Especially in the era of big data, it is particularly important to cultivate professional talents. Excellent professional big data talents often need a solid professional theoretical foundation and rich experience, as well as a proficient mastery of Internet information technology. At present, the development of small and micro enterprises is still in the process of groping and development. In order to keep up with the pace of advanced technology, enterprises are also actively introducing advanced machinery and technology, but no matter what, human operation is required, ignoring the importance of professional talent training. Difficult to achieve business goals. On the other hand, due to poor working conditions and low wages, it is difficult to attract professionals with certain knowledge and experience. In the era of big data, the business environment and job requirements are constantly changing, and the existing financial management personnel of small and micro enterprises cannot continue to maintain the necessary quality and professional capabilities. When small and micro enterprises perform basic financial management functions such as financial management, forecasting, decision-making, and planning, they do not have specialized financial management personnel to provide operators with advice.


4.1. Cultivate the Awareness of Financial Management of Small and Micro Enterprises
Financial management is one of the important modules of an enterprise, and first of all, we must pay attention to it in consciousness. The management is the person or the form of organization that has the management responsibility for the execution of corporate activities. In the field of information technology, the management layer includes data collection, transmission, access, and management. Generally, a database management system is used as the core software, which is the foundation of the information system. As the core force of management activities and decision-making activities, the management is more obliged to realize the value of big data, and always remind companies to understand real-time information and make strategic adjustments, so as to avoid losses caused by mistakes in decision-making and promote Business activities are carried out in a planned and efficient manner [8]. In addition, the management should formulate a strict financial management system, manage as required and integrate big data thinking with management activities, and transform big data technology into competitive capital. Finally, it is also the responsibility of the management to correctly and effectively guide the employees to establish a strong sense of data.

4.2. Strengthen the Informatization Construction of Small and Microenterprises
First of all, the Administrative organ plays an irreplaceable role in the informatization construction of small and micro enterprises, and of course it has also been recognized in practice. Programs, corporate healthy growth plans, etc. provide training consulting, e-commerce and other information services for small and medium-sized enterprises. The Administrative organ can promote the informatization construction of small and micro enterprises in the following ways: one is to use the resource advantages of local authorities and information service providers to promote small and micro enterprise informatization projects nationwide; promote applications and impart experience. The second is to introduce
preferential policies for informatization construction to reduce the cost of informatization construction. The third is to provide necessary subsidies and training for small and micro enterprises. In addition, small and micro enterprises need their own strength to realize informatization construction. The first step for enterprises is to incorporate informatization construction into their development strategy. The second is to increase capital investment and improve the construction of software and hardware. Finally, companies should establish their own information systems and select appropriate information products based on their understanding of their own needs and combining their own characteristics.

4.3. **Strengthen Information Sharing**

Between enterprises, communication and cooperation are the kingly way. The necessary information sharing can achieve shared information resources between enterprises, which can provide inspiration for solutions to difficult problems, so as to achieve the goal, and scientifically plan the production and operation of the enterprise. Respond to ever-changing market requirements. Within the enterprise, it is also very important for the mutual cooperation between various departments to abandon the idea of working in isolation. In order for the company to make informed and appropriate decisions within an appropriate time and correctly predict future risks, it must share the data and the conclusions derived from the analysis of the data between departments. If small and micro enterprises want to be invincible in the competition of the big data era, the first step is to set goals, the second step is to establish data analysis capabilities, and the third step is to use big data to maximize corporate value. These three steps are the basic requirements. An indispensable link. The key to establishing data analysis capabilities is to collect high-quality data, learn and introduce advanced technical tools, and recruit senior talents proficient in data-related majors, such as data analysis personnel who are proficient in data analysis and processing related professional techniques and proficient in statistics.

4.4. **Strengthen the Construction of Professional Talent Team**

Entering the information age, the development of corporate financial management must break through the traditional mode of thinking, implement an innovation-driven development strategy, and externalize the sense of innovation in the industry and internalize it in the heart. For this reason, enterprise management and relevant decision-makers must pay attention to the introduction of talents and cultivate a group of data management talents with professional competence.

First: The management of the company should pay attention to the HR personnel training policy, and select the personnel policy that suits the company. In addition to internal training, it must also consider external recruitment. Arrange reasonable jobs according to the knowledge level of the talents, and also make internal training of big data technical talents the top priority of the work, and regularly conduct professional knowledge training for personnel to enhance their data processing capabilities and information operation capabilities.

Second: organize educational activities and competitions related to data management to enrich the knowledge of internal data management personnel, improve management capabilities, and enhance unity and collaboration capabilities [9]. At the same time, financial personnel also need to strengthen their own information quality training, improve their own comprehensive ability level, learn advanced financial big data processing technology, and gradually transform from financial professionals to full-time business.

5. **Conclusion**

Big data has brought unprecedented opportunities for small and micro enterprises, as well as more difficult challenges. All of these have had a profound impact on the development of small
and micro enterprises. In the face of opportunities, what small and micro enterprises must do is to seize the opportunity and make timely strategic adjustments. When faced with problems, they must break free from the shackles of traditional thinking, change the past financial management concepts, and integrate the application of big data with the construction of small and micro enterprises. In combination, make full use of the advantages of big data to improve the financial management system of small and micro enterprises and improve the level and efficiency of financial management of small and micro enterprises. In the fierce market competition, if small and micro enterprises want to survive, they must make use of the characteristics of the big data era and combine their own actual conditions to perform specific analysis of specific problems, and obtain problem-solving methods and improvements through continuous reform and learning. Financial management level.

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References


