



Application of Big Data Analysis Technology in Financial Investment Risk Management

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Abstract. Based on the application of big data analysis technology in financial investment risk management, this paper makes a detailed analysis to help enterprises reasonably plan financial investment and realize the reasonable control of financial investment risk. Data analysis carries out systematic processing according to financial information, establishes financial data model, brings data information into the model, and obtains effective information through model transformation and processing, so as to provide factual basis for enterprise financial investment and avoid financial investment risk. The application of data analysis technology has greatly promoted the intelligence of financial investment risk management and accelerated the rapid integration of data analysis and financial investment. The main integration of big data is formed through data analysis.

Keywords: Big data analysis technology · financial investment · Risk management · data processing

1 Introduction

Financial investment risk management uses big data analysis technology to build a complete financial information processing system [1]. With the continuous rise of financial data, the requirements for data processing are becoming higher and higher. Due to the intelligence and efficiency of data analysis technology in information processing, data analysis technology is deeply applied in the financial investment risk management industry [2]. Big data analysis technology uses data integration and distributed data model to establish financial data model to help enterprises reasonably avoid financial risks, steadily invest and reduce business risks. At the same time, data analysis technology also stimulates the market vitality of financial enterprises, promotes the innovation of financial investment risk assessment system and improves the overall anti risk level of the financial industry.

2 Financial Information Processing System

The financial investment industry can timely control the risk crisis and speed up the implementation of the treatment scheme by using big data analysis technology [3].

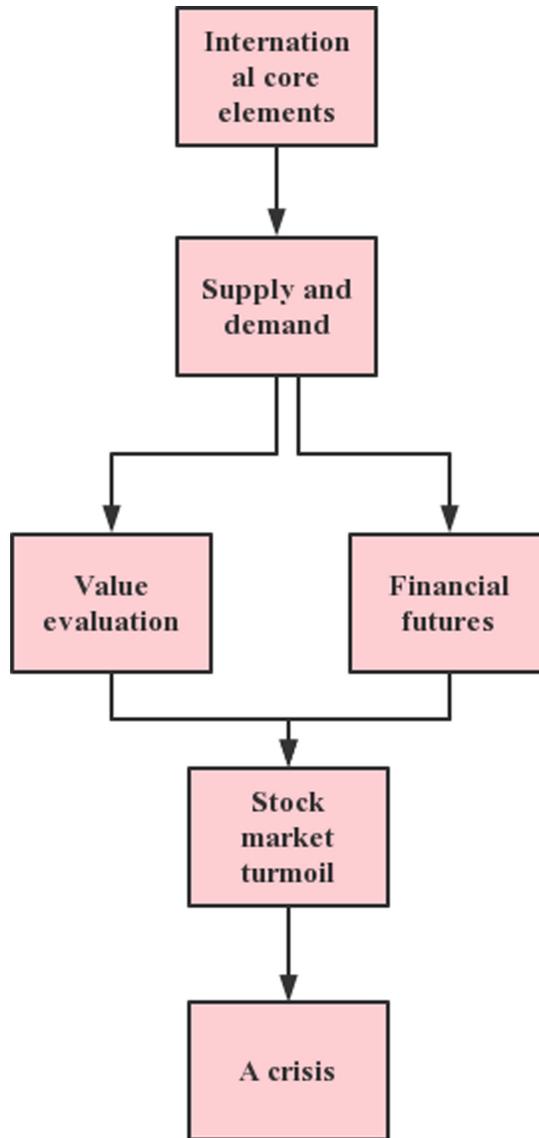


Fig. 1. Financial investment risk process

With the rapid development of big data, the application of data analysis is more about the extraction and analysis of data information, so as to help users obtain meaningful information. Data analysis technology establishes a preliminary financial data collection website in the financial investment industry. Using data analysis technology, financial enterprises can effectively manage and control financial market information and risk early warning information, so that financial enterprises can advance the probability

of risk occurrence, take various risk prevention and control measures, and minimize economic losses [4] (Fig. 1).

At the same time, data analysis technology can also ensure the security of financial transactions and data. Many enterprises are vulnerable to external attacks in the process of financial transactions [5]. At the same time, when financial information is exchanged and shared, it is also prone to system vulnerability crisis, By installing security detectors in the system, data analysis technology will immediately alarm and close the transmission channel in case of loopholes in the system, so as to ensure the security of information and funds. Data analysis can effectively prevent and control risks and respond to risks according to the data information in financial investment risks, so as to minimize losses. Another advantage of data analysis technology is that it can collect potential users in a wide range, help financial enterprises quickly and accurately grasp customers' consumption needs and plan relevant financial services [6]. When customers conduct corresponding financial operations, they can use data analysis to effectively manage the customer's capital account, and do a good job in safe storage to fully ensure the safety of customers' funds.

3 Application of Data Analysis Model

The application of data analysis model is constantly optimized to provide support for different information processing systems. According to the analysis technology, it can be seen in the risk control activities of different financial enterprises [7]. The importance of processing data information and the role of data analysis in calculating and analyzing the results are very influential [8]. To find the potential financial crisis, insurance enterprises can not do without the application of data extraction technology, which plays a very important role in the operation and future development of insurance enterprises (Fig. 2).

Therefore, in order to accurately grasp the degree of risk crisis, we need to analyze the data information more accurately and reasonably [9]. Let data analysis scientifically analyze financial risk information and establish a complete and systematic financial data information base [10]. Through the collection, analysis, research and collection efficiency of customer information, ensure that all financial enterprises can grasp the dynamics of the financial market in real time, help enterprises to reduce investment risks, reduce unnecessary operations for insurance companies in financial activities, and provide customer services for better protection [11]. Financial companies apply data mining technology to effectively analyze data information and organize information data, so as to provide greater security for the database of financial companies [12]. Financial enterprises can effectively reduce the risk of financial investment through data analysis technology and data and information related to various financial services [13] (Fig. 3).

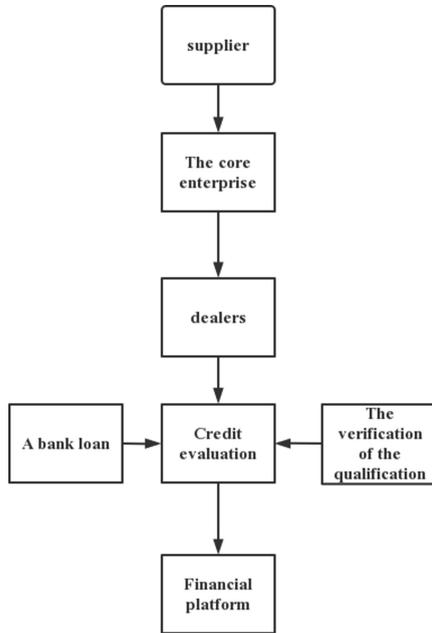


Fig. 2. Financial supply business

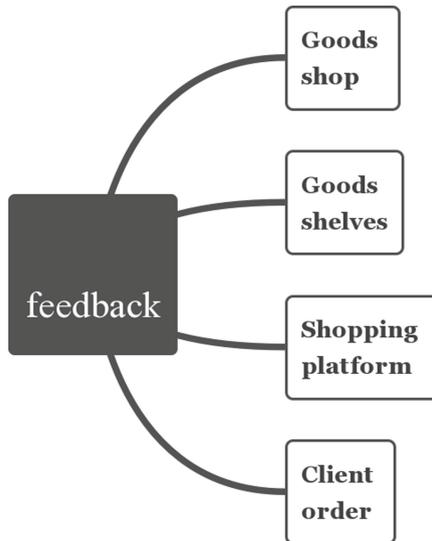


Fig. 3. Logistics distribution mode

4 Conclusion

The application of big data analysis provides a more intelligent and digital risk analysis system for financial investment risk management, and creates a new financial application mode for financial investment [14]. Big data analysis technology provides reliable data resources for enterprises' financial investment [15]. At the same time, it can predict and control the financial risks of the whole enterprise, which greatly improves the anti risk ability and economic benefits of enterprises [16]. The application of big data analysis technology can not only promote the order of enterprise financial investment risk management, but also accurately grasp the existence of financial risks, help enterprises adjust investment plans and reduce economic losses [17]. The application of analysis technology can promote the sound development of financial risk enterprises [18].

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