

Retraction

Retracted: Discussing the Construction of a Budget Management System Combining Multimedia Technology and Financial Risk Management

Advances in Multimedia

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their

agreement or disagreement to this retraction. We have kept a record of any response received.

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- [1] X. Jiang, "Discussing the Construction of a Budget Management System Combining Multimedia Technology and Financial Risk Management," *Advances in Multimedia*, vol. 2022, Article ID 7173755, 9 pages, 2022.

Research Article

Discussing the Construction of a Budget Management System Combining Multimedia Technology and Financial Risk Management

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The development of modern technology allows enterprises to continuously expand the means of financial management. The use of advanced information technology and modern management means makes the financial management of enterprises continue to improve, but there are also many problems. In the face of various types of risks that enterprises may face at present, in addition to strengthening financial accounting, enterprises should also recognize the various risks that the double-edged sword of financial management informatization may bring to enterprise financial management and carefully analyze the reasons for the emergence of risks, from the ideological and technical means to continuously improve the entire process of financial management informatization, which is an important topic for every financial worker to discuss. This paper mainly studies and innovates the data mining process and the support vector machine model and designs the data preprocessing method in the data mining process to perform feature selection and optimize the parameters of the support vector machine model. The specific process is as follows: based on CRISP-DM, the industry-standard model of the data mining process, a series of data preprocessing, eigenvalue extraction, parameter optimization, training set pruning, and other methods are designed from business understanding, data understanding, data preparation, and other aspects to improve data quality. In the traditional support vector machine, when the test sample is located at the boundary point of the hyperplane, the judgment may be wrong. In the aspect of SVM model improvement, according to the discrimination method of SVM, the weighted K-nearest neighbor algorithm is introduced to redistinguish the qualified test samples in the feature space. From the whole process of data mining, a data mining system is designed, which is “data preprocessing standardization + genetic algorithm feature selection + training set pruning + support vector machine classifier discrimination optimization.” Finally, this paper uses a series of data mining optimization methods designed to mine the actual financial data of listed companies and has achieved good results.

1. Introduction

From the outbreak of the information revolution to the present, its impact has now penetrated into everyone's daily life [1]. It can reach other corners of the world through the Internet [2]. It is exponential [3]. If the generated massive data cannot generate corresponding value, it will cause great waste [4]. It is through the database [5]. In the fiercely competitive environment, they need to be more intelligent. It is also necessary to process data and obtain predictions about future market trends [6]. It is also necessary to be satisfied [7]. Access is available to them [8]. This series of

real-world needs has led to the rise of technologies for discovering knowledge in data [9].

In order to discover the knowledge hidden under a large amount of data, people have made a lot of explorations from different fields [10]. Data mining is a new discipline born from the need for practical applications [11]. In the current new information frenzy of the Internet of Things, cloud computing, e-commerce, and mobile terminals, the application of data mining is becoming more and more extensive [12]. It has received great attention, and its scope includes customer relationship management, risk identification and assessment, market analysis and forecast, bank guarantee,

and credit assessment [13]. In the banking industry, through the collection and accumulation of customer information and the establishment of relevant data models, more precise and personalized marketing can be achieved [14]. At the same time, in dealing with financial risks, data mining technology is used to evaluate risky enterprises or financial behaviors to achieve risks [15]. Controllable state; at present, many financial institutions are also actively introducing data mining methods to predict the trend of the stock market and other financial markets and analyze the market, and financial monitoring institutions can determine possible risky behavior [16]. In a word, as people enter the era of big data, this practical discipline of data mining will play a more important role in various fields [17].

At present, China has become one and ranks among the top in the world in attracting foreign investment and foreign investment [18]. With your new pattern, the Chinese government proposed the global economy and built a broader community of interests [19]. Internet technology has further accelerated the development of the diversification and integration of the world economy [20]. In addition to the smooth trade brought about by the high degree of economic integration, the financial risks that enterprises need to face have also become more diverse and inexorable. It is determined that the more sources and directions of financial risk, the greater the likelihood that the business will suffer financial losses. Some researchers believe that the occurrence of 2008 reflects the emergence of a new economic crisis that affects the development of world trade. The control of the financial system by capitalist countries has gradually fallen into a situation that is out of actual needs, and economic storms are brewing all the time [21–23]. In the age of big data, enterprises put forward higher requirements for the effectiveness of external data and the accuracy of their own financial data, which can effectively improve the financial efficiency and enhance the enterprise's financial analysis ability but also generate new financial risks, which requires enterprises to correctly understand and implement control, so that enterprises can adapt to the development requirements of the age of big data.

Domestically, although China's economy is already in the stage of recovery, it still faces many problems, such as poor independent innovation capability of enterprises, lack of well-known brands, and lags behind developed countries in terms of technological development. On the other hand, under the uncoordinated economic development for a long time, many problems have arisen: first, the contradiction between the urban-rural dual structure and the urban dual structure is still relatively prominent; the second is that the level of social civilization and national quality does not match the level of economic and social development. Therefore, in such an economic environment with multiple challenges, the risk factor will increase, and the market will also put forward higher requirements for enterprises. If there is insufficient competitiveness, not only will they be eliminated by enterprises in the same industry, but they will also be eliminated by the market. Under the guidance of the principle of survival of the fittest, high-quality enterprises will be retained, and inferior enterprises will be eliminated.

Then the enterprise needs to strengthen its own management and improve the management level of the enterprise, especially for the avoidance of financial risks; the enterprise should form the basic concept of "prevention is more important than remedy."

Based on this, in order to adapt to the new requirements for the healthy development of enterprises in the current information background, this paper mainly researches and innovates from two aspects: the data mining process and the support vector machine model. Based on CRISP-DM, the industry-standard model of the data mining process, a series of data preprocessing, eigenvalue extraction, parameter optimization, training set pruning, and other methods are designed from the aspects of business understanding, data understanding, and data preparation to improve data quality. In the aspect of improving the SVM model, according to the discriminant method of SVM, the weighted K -nearest neighbor algorithm is introduced to discriminate the qualified test samples in feature space again. Finally, a series of data mining optimization methods are used to mine the actual financial data of listed companies, and good results have been achieved.

2. Materials and Methods

2.1. The Characteristics and Functions of Financial Management Informatization

2.1.1. *The Connotation of Financial Management Informatization.* The informatization of financial management is a product of the new era and a new form of financial management. Financial management informatization has the ability to realize multilevel control, allowing enterprises to realize the integration of operation, capital, and financial management through the informatization management model, strengthen data analysis and sharing, and avoid the transmission risks brought by using traditional methods. Data is processed digitally; the management can make the correct summary and decision-making. Therefore, financial management informatization should run through all aspects of enterprise financial management and the enterprise and lay a solid general rear for the overall development. Financial management informatization has the characteristics of realizing synchronization of logistics, capital flow and information flow, integration of financial management, the flexibility of financial organization, and supply chain of financial resources. From the perspective of historical development, China's enterprise financial management informatization has experienced three stages of development: the use of stand-alone accounting computerization software, the establishment of local area networks within enterprises, the use of unified network financial software, and the integration of internal and external processes of enterprises.

2.1.2. *The Characteristics of Financial Management Informatization.* First, financial management informatization has the characteristics of timely synchronization of information. The application and deepening of Internet

technology have enabled enterprises to synchronize their platforms in production and sales. They can count funds in a timely manner, understand the whereabouts of products, and have clear logistics information. Secondly, financial management informatization has the characteristics of resource intensification. Informatization has changed the traditional way of financial accounting management and has made great breakthroughs in the inherent organization. It is convenient for enterprises to make full use of available resources according to the current development and profitability, build a grid management system, and retain traditional financial management. The high-quality process avoids unnecessary capital investment so as not to waste. In addition, resource intensification can also provide timely feedback to enterprise managers on operating results so as to strengthen financial budgets and provide convenience for whole-process control.

2.1.3. The Important Role of Financial Management Informatization on Internal Control. The theory of enterprise internal control is also improving with the development of financial management informatization. To strengthen enterprise internal control, we must pay attention to risk management and incorporate risk management into the process of enterprise financial management. The internal control of an enterprise is related to the realization of the long-term strategic objectives of the enterprise. The development of the enterprise must combine the short-term and long-term objectives and formulate an internal control system suitable for its own development law. The financial information management system is not only a system to record the business activities of the enterprise but also to analyze and study the daily financial data so as to discover the management risks of the enterprise, find out the way to promote the development of the enterprise's benefits and escort the healthy development of the enterprise.

In the process of financial management informatization construction, enterprises should focus on optimizing the existing organizational structure, changing the internal control environment, selecting appropriate personnel to learn the informatization management process, gradually replacing traditional accounting management methods, improving work efficiency, and streamlining the structure. Only when the level of accountant financial management and information management reaches a certain standard can the information construction of enterprise financial management be better guaranteed. In view of the requirements for talents in the informatization construction of enterprise financial management, the following attempts can be made: organize internal training, hold lectures or symposiums so that employees can establish a very important concept of informatization construction, while managers can change the traditional management thinking, and help the efficient construction of enterprise financial management informatization. Improve the entry threshold of enterprise-related personnel, give priority to hiring talents with both financial management and information management capabilities, or reward experienced technicians for improving the

management level of talents in the enterprise. Enterprises are gradually developing towards a "centralized" and "coordinated" structure, realizing gridization of financial management work, promoting enterprises to change the internal control environment, strengthening internal control of enterprises, and paying attention to strengthening organizational planning, realizing the separation of business and accounting, and continuously optimizing enterprises. Internal control environment, and constantly improve the accounting processing system to ensure the correctness of corporate data. This not only improves the efficiency of work but also facilitates leaders to grasp the financial situation so that the company can avoid detours, make correct decisions, and keep the company alive forever.

Financial risk refers to the risk that the company's financial structure is unreasonable and improper financing may cause the company to lose its ability to pay debts, leading to the decline of investors' expected returns. Its main characteristics are as follows: the first is objectivity. Financial risk exists at any time and is not transferred by human will. People can neither avoid it nor eliminate it. They can only deal with risks through various technical means to avoid risks. The second is comprehensiveness. Financial risks exist in the whole process of enterprise financial management and are reflected in a variety of financial relationships. The third is uncertainty. That is, financial risks may or may not occur under certain conditions and within a certain period of time. The fourth is coexistence. That is, the risk is proportional to income. The greater the risk, the higher the income. On the contrary, the lower the income.

2.2. Risk Assessment of Financial Management Informatization

2.2.1. Decision Risk. Enterprises will also encounter various risks in the process of operation and management. Risks may increase the difficulty of enterprises in decision-making and make enterprises face difficulties in capital and logistics. Because some factors are not easy to determine, business decision-making may not achieve the expected goals, so reducing decision-making mistakes and reducing decision-making risks are very important for enterprise informatization construction. In the process of establishing a financial information management system, enterprises should clarify the goals and management methods to avoid the problem of financial information asymmetry due to information distortion, and wrong decisions will be detrimental to the development of the enterprise. On the other hand, if an enterprise does not carry out risk management according to its own current situation but only imitates the existing systems of other enterprises, it may not be able to make a management plan suitable for its own development, and it may encounter unknown decision-making risks, which will affect the sustainable development of the enterprise.

2.2.2. Operational Risk. The informatization of enterprise financial management does not mean that the enterprise has more computers for accounting processing, but the financial

personnel fully tap the potential of human resources and dig information resources through the use of modern information technology so that the enterprise can better achieve operational results. If the behavior of the software is not standardized or errors occur during the operation of the software, or if the investment in the software, the organizational structure of the enterprise, and various factors of related technical personnel have changed, it may cause losses to the enterprise. Therefore, it is necessary for the enterprise to increase scientific management. The safety factor of enterprise development ensures that the capital operation of the enterprise is guaranteed and the operation risk is controlled within a controllable range. What enterprises need to pay attention to is doing what they can to keep risks under control, not to eliminate risks from now on.

2.2.3. Environmental Risks. At present, due to the continuous improvement of the performance of financial management software in the market, there are many kinds of financial management software that enterprises can choose from. However, the problem exposed is that the quality of the software is uneven, and even some enterprises are irresponsible and do not purchase genuine financial processing software, which brings hidden dangers to the operational safety of enterprise financial management, and also allows enterprises to enter the country that does not meet the national financial management standards. Normative ranks. Faced with the drastic changes in the market environment, enterprises must make timely adjustments to their strategies and structures according to the current market environment. If the old financial management methods are still adopted, they will not be able to adapt to the speed of scientific and technological progress, nor can they meet the needs of enterprise development, and will generate other unnecessary investments in the process of financial management informatization. In addition, in addition to environmental risks, enterprises may also face other risks, that is, changes in the external economy, which will also hinder the development of corporate financial management.

2.3. Relevant Theoretical Overview and Enlightenment

2.3.1. Life Cycle Theory. The lifecycle of an enterprise is like the invisible hands that control the future development direction and trajectory of the enterprise. Ichak Adizes, an American, is one of the most representative figures in the enterprise life cycle theory. He has spent more than 20 years studying the development, aging, and decline of enterprises. He wrote *Corporate Lifecycle*, dividing the enterprise life cycle into ten stages, namely: gestation period, infancy, toddler period, adolescence, adulthood, stability period, aristocratic period, early bureaucratic period, bureaucratic period, and death. Adizes accurately and vividly summarizes the characteristics of different stages of enterprise life, proposes corresponding countermeasures, indicates the basic laws of the enterprise life cycle, and suggests the relationship between basic development and restriction in the process of enterprise survival.

2.3.2. Enterprise Adversity Theory. The theory of enterprise adversity management was first put forward by She Lian in 1999. It is a basic theory to reveal the cause mechanism and movement law of enterprise adversity phenomena: business failure, management fluctuation, and management behavior failure, and study the management methods to prevent and get rid of enterprise adversity and maintain enterprise prosperity. The main research idea of the enterprise adversity management theory is to establish its research proposition and research content by regarding the management error behavior and the fluctuation of management order and function in the enterprise's business activities as a kind of internal activity law that cannot be fully explained by the existing theory. Its theoretical goal is to reveal the mechanism of error recognition and error prevention in a favorable situation and the mechanism of error correction and error transformation in the adverse situation of the enterprise on the basis of revealing the activity law of the enterprise in the adverse situation so that the enterprise activities are always in the "safe" movement track.

In fact, once one of the following situations occurs, it means that the enterprise is in a state of adversity: first, the business activities of the enterprise are facing a series of serious losses, and these losses are difficult to make up; second, the market share of the product is greatly reduced, and the output is greatly reduced. Decline, the enterprise is facing a situation of financial loss; the third is the phenomenon of insolvency the enterprise. In real life, once the adversity of an enterprise occurs, it cannot be recovered and transformed in a short period of time.

3. Results and Discussion

3.1. Data Preprocessing Optimization. The data, in reality, are complex, and the business understanding of the data varies from person to person. The data sources are not unified, system failures, and irregular operations. The data will inevitably have missing data, redundant data, inconsistent data, etc. "Dirty data" will greatly affect the entire data mining modeling process and lead to wrong models. However, a lot of practice has proved that in the data mining system, it takes about 60% of the time to understand and preprocess the data in the early stage. To get an accurate model, high-quality data is essential, so how to do in the early stage of modeling Extracting metadata information and how to communicate with experts and business people to understand and analyze the data are very important. Considering the various problems that may exist in the financial data to be analyzed later, it is necessary to design an appropriate data preprocessing process to obtain "clean" data, which can improve the accuracy of modeling and make use of understanding the data. The four steps of data preprocessing are data cleaning, data integration, data transformation, and data reduction. Data preprocessing refers to the necessary processing, such as review, screening, and sorting, before classifying or grouping the collected data. Data preprocessing, on the one hand, is to improve the quality of data; on the other hand, it is also to adapt to the software or methods of data analysis.

One idea proposed in this paper is to streamline a series of data preprocessing methods and perform interactive data understanding and data preparation through data input and data feedback output. The flow chart is depicted in Figure 1.

Firstly, k is arbitrarily selected from the specific definition as follows:

$$E = \sum_{i=1}^k \sum_{p \in C_i} |p - m_i|^2. \quad (1)$$

It represents the object space, m_i is the mean of cluster c_i .

Attributes with too high correlation or too little information can be considered to be eliminated; mining algorithm saves time and improves accuracy. Therefore, in addition to the correlation test introduced in statistics, the entropy-based discrete dimensional reduction method is used to analyze the attributes, and the formula is as follows:

$$I(A, T) = \frac{|A_1|}{|A|} \text{Ent}(A_1) + \frac{|A_2|}{|A|} \text{Ent}(A_2), \quad (2)$$

where A_1 and A_2 are a division of A and satisfy the conditions: $A < T$ and $A > T$, respectively. The entropy function Ent can be calculated rows in the given set. For example, given m different categories, the entropy of A_1 is

$$\text{Ent}(A_1) = - \sum_{i=1}^m p_i \log_2(p_i), \quad (3)$$

where p_i is the probability of occurrence of class i in A_i . This value can be obtained by dividing the number of rows of category i in A by the total number of rows of data in A_1 . The value of $\text{Ent}(S_2)$ can also be calculated similarly.

This method normalizes A according to the deviation $X\delta$ and the mean X of the attribute A . The value a in attribute A can obtain its mapped value a' through the following calculation formula, and the formula is as follows:

$$a' = \frac{a - \bar{x}}{\delta_x}. \quad (4)$$

Let A_{\min} and A_{\max} be the minimum and maximum values of attribute X . Then, we map a value a of A to a' and have $a' \in [A_{\min}, A_{\max}]$; the formula is as follows:

$$a' = \frac{a - \min_A}{\max_A - \min_A} \left(\text{new_max}_A - \text{new_min}_A \right) + \text{new_min}_A. \quad (5)$$

3.2. SVM Parameter Optimization. The process of judging the test sample category by the SVM model is to use this classification hyperplane to intercept the test sample, the hyperplane the test sample belongs to. There are two types of test samples, A and B , and the discriminant:

$$f(x) = \text{sgn} \left[\sum_{x_i \in SV} y_i \alpha_i^* (x_i, x) + b^* \right]. \quad (6)$$

In Formula (6), b represents the distance between the sample and the classification hyperplane. According to the support vector machine theory, this distance is the one.

In order to use the one to improve point discrimination method in the support vector machine.

$$d_i = \|\varphi(x_i) - \varphi(x)\|^2 = K(x, x) - 2K(x, x_i) + K(x_i, x_i). \quad (7)$$

It is selected in the SVM process. Since both $iK(x, x)$ and $iK(x, x)$ have been calculated in the SVM process, the calculation will not increase the amount of calculation. The specific judgment rule is as follows: we set a certain critical point ε , substitute the sample x into equation (6), if its discriminant function $g(x) < \varepsilon$, then we calculate the difference between this sample x and all training samples through equation (7). Distance $\{d_i\}$, we find the smallest k among them and, finally, discriminate the sample points to be discriminated according to the class discrimination rule. The discrimination flow chart is shown in Figure 2.

As a preliminary exploration, ε can be set equal to the mean of $g(x)$ in all test samples minus twice the standard deviation, that is,

$$\varepsilon = \overline{g(x)} - 2\sigma. \quad (8)$$

3.3. Mutation Assessment. For positive index and negative index, refer to the range transformation method. For a moderate index, it is necessary to obtain so that the index is transformed into the smaller, the better, and then the negative index formula of the range transformation method is used to carry out the deal. Let x_{ij} denote the j th indicator of the i th company, and the specific formula is as follows.

For positive indicators (the bigger, the better),

$$y_{ij} = \frac{x_{ij} - \min(x_{ij})}{\max(x_{ij}) - \min(x_{ij})}. \quad (9)$$

For negative indicators (the smaller, the better),

$$y_{ij} = \frac{\max(x_{ij}) - x_{ij}}{\max(x_{ij}) - \min(x_{ij})}. \quad (10)$$

For moderate metrics

$$y_{ij} = \frac{\max(z_{ij}) - z_{ij}}{\max(z_{ij}) - \min(z_{ij})}. \quad (11)$$

In this paper, the convolution wrapper method is used to select the feature subset, the support vector machine algorithm is used as the classifier, the fitness function uses the accuracy of the model to filter the offspring, and the support vector machine is used as the learner. The accuracy rate is calculated for each individual as the evaluation value of the fitness function. The specific algorithm is as follows: the feature selection algorithm has four steps: subset generation, subset evaluation, stopping conditions, and result verification. The goal is to eliminate redundant attributes and improve accuracy, and reduce computational complexity. Let the feature set be

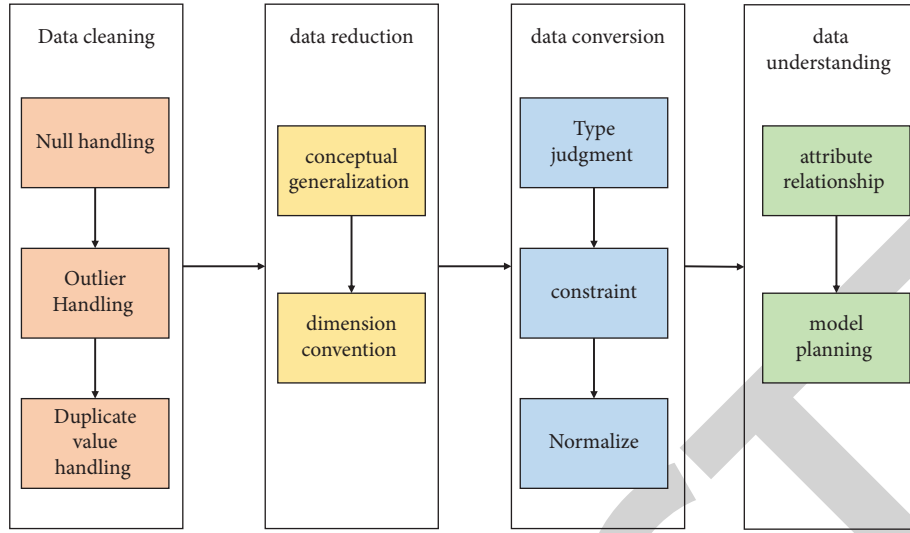


FIGURE 1: Data preprocessing flow chart.

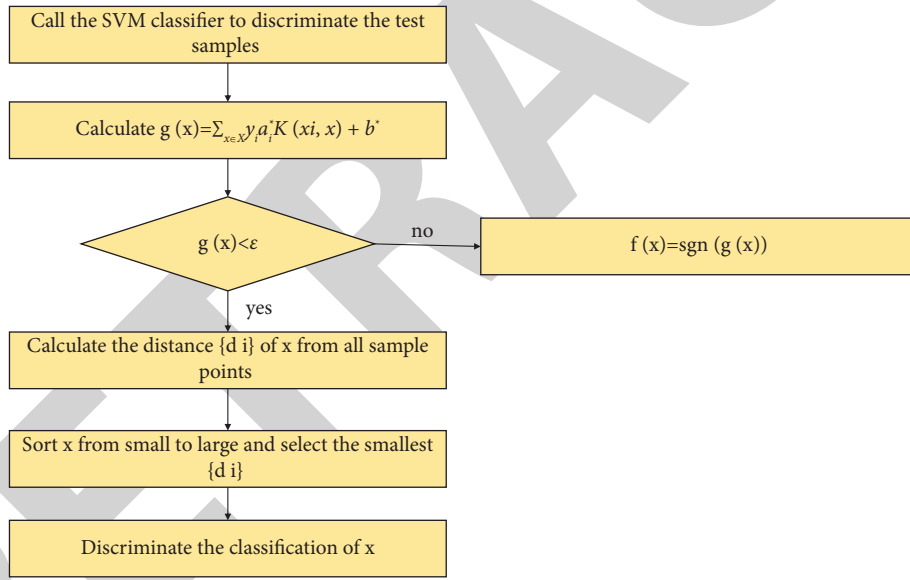


FIGURE 2: The improved flow chart of the test sample discrimination method.

$$G = \{g_1, g_2, \dots, g_n\}. \quad (12)$$

N is the number of feature sets, and feature subsets are represented by binary vectors:

$$C = \{c_1, c_2, \dots, c_n\}, \quad (13)$$

$$c_i \in \{0, 1\}, i = 1, 2, \dots, N.$$

The process of feature selection is to search for an optimal feature subset.

The objective function $G(c)$ is set to represent the performance of the selected feature subset C , and the feature

selection problem is transformed into a combinatorial optimization problem: that is, to find $C \max (G(c))$.

$$y' = \arg \max_v \sum_{(x_i, y_i) \in D_\delta} w_i \times I(v = y_i). \quad (14)$$

Otherwise, we return 0. The weighted K -nearest neighbor algorithm is mainly used to change for the problem that each of the weights is

$$w_i = \frac{1}{d(x'_i, x)^2}, \quad (15)$$

than those close to φ .

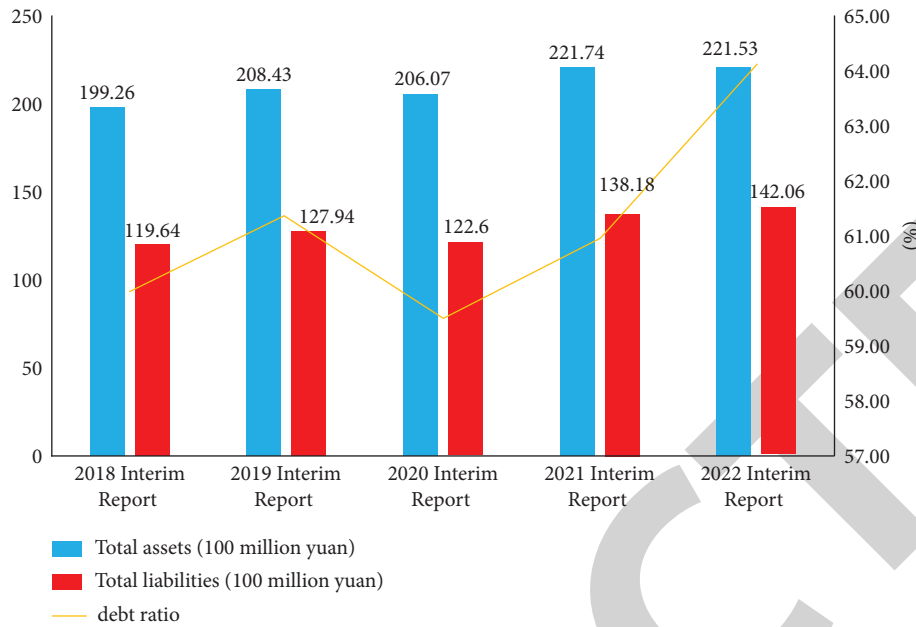


FIGURE 3: The asset-liability ratio in 2018–2022.

3.4. Experimental Results and Analysis

3.4.1. *Analysis of Financial Status.* As shown in Figure 3, a company’s asset-liability ratio fell sharply from 2015 to 2016, from 60.95% to 55.22%, and then increased year by year during the four-year period from 2016 to 2019. As of 2019.12.31, a company’s asset-liability ratio has reached 62.37%.

Debt term structure describes the amount of short-term or long-term debt in a company’s total assets or total assets. The nature of debt maturities can determine how a company chooses debt financing and understand the creditworthiness of a company’s long-term and short-term debt.

Figure 4 shows the percentage of debt of a company. The percentage of short-term debt to total debt fell from 91.21% in 2015 to 64.5% in 2016 and increased year by year in the following years, reaching 89.45% by the end of 2019. Long-term debt as a percentage of total debt peaked at 35.5% in 2016 and then declined year-over-year to reach 10.55% by the end of 2019. In terms of debt financing, a company prefers short-term debt financing, and the increase in short-term debt increases the risk of short-term debt repayment of a company.

Profit growth: operating income and net profit are shown in Figure 5.

It can be seen from Figure 5 that the operating income of Vosges has been increasing year by year since 2015, reaching a five-year maximum of 5.155 billion yuan in 2018 and then falling back in 2019. The company’s net profit reached a five-year maximum of 410 million yuan from 2015 to 2017 and then decreased year by year from 2018 to 2019 to only 369 million yuan in 2019. In 2018, its operating income was very high, reaching 5.155 billion yuan, but its net profit was only 405 million yuan. The reason is the cost of the textile

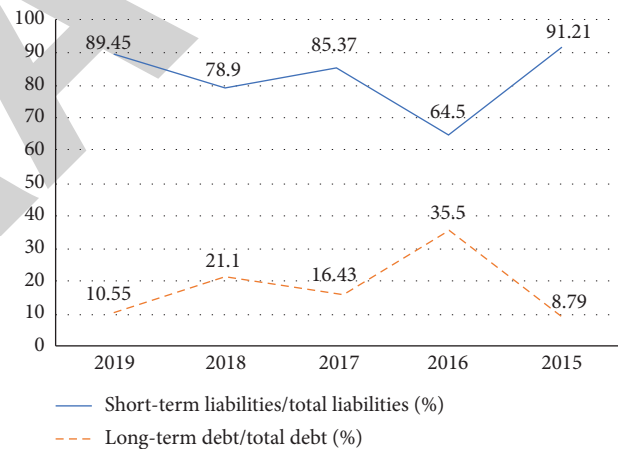


FIGURE 4: The debt ratio of a company.

industry. At the same time, the entire textile industry is all due to the decreasing demand for textile goods caused by the constant reduction because the price difference of grass cotton inside and outside the mirror of the People’s Republic of China is getting bigger and bigger.

3.4.2. *Model Discrimination Results and Rule Set.* The CART decision tree model designed by prepruning and post-pruning is (1) Discrimination results and rule set of the overall financial risk assessment model of the enterprise.

Because there are too many evaluation eigenvalues Figure 6 shows the importance of variables

The variable importance map generated by the enterprise operation risk assessment model is shown in Figure 7.

As can be seen from Figure 7, for the judgment results, the importance of the six characteristics belonging to the

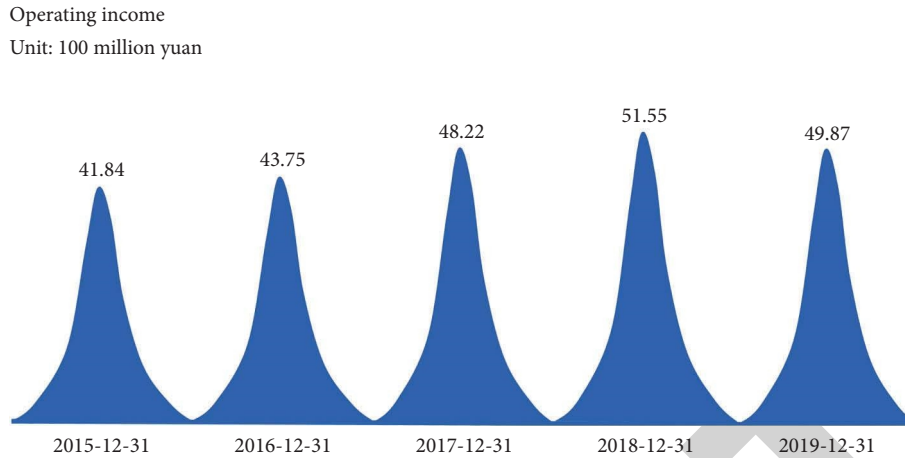


FIGURE 5: A company’s operating income from 2015 to 2019.

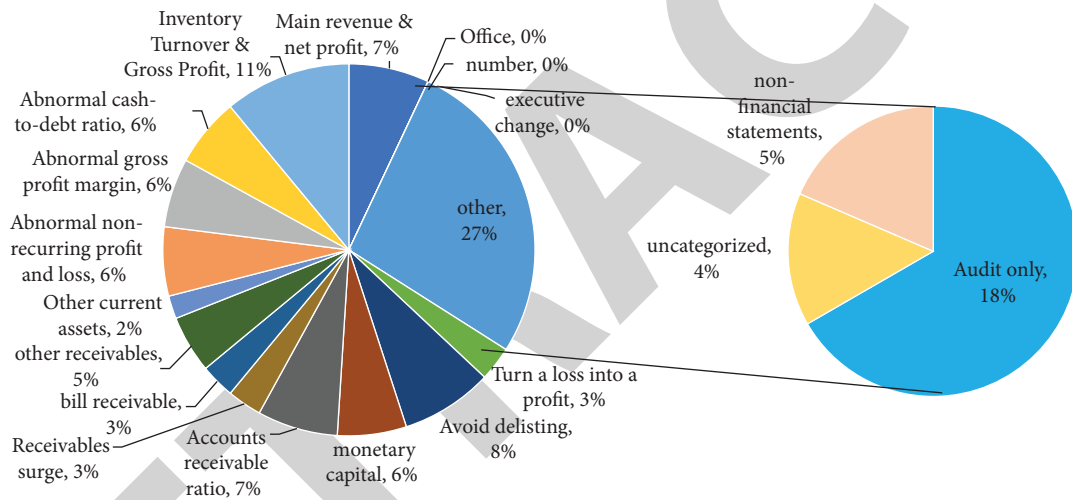


FIGURE 6: The importance of variables in the overall financial risk assessment of enterprises.

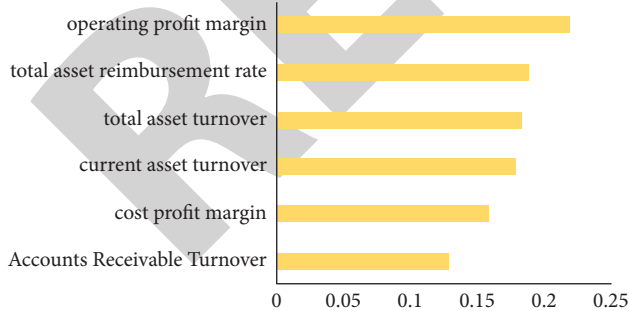


FIGURE 7: Importance of variables in enterprise operational risk assessment.

business risk is basically the same, and of “operating profit rate” has become an evaluation index. Therefore, the results of the model show that listed companies should pay attention to these 6 indicators in the process of evaluating business risks.

4. Conclusion

To sum up, the current background of informatization has put forward new requirements for the healthy development of enterprises. The update in information technology makes enterprises have to strengthen the construction of financial informatization. Only business leaders fully understand the importance of financial management informatization construction; only by promoting system construction, strengthening financial risk management and control, and improving talent team construction can we continuously improve the core competitiveness of enterprises and help enterprises to establish and improve their financial management information systems. This paper mainly studies and innovates the data mining process and the support vector machine model and designs the data preprocessing method in the data mining process to perform feature selection and optimize the parameters of the support vector machine model. In the aspect of SVM model improvement, according

to the discrimination method of SVM, the weighted K-nearest neighbor algorithm is introduced to re-discriminate the qualified test samples in the feature space. Finally, a series of data mining optimization methods designed are used to mine the actual financial data of listed companies, and good results have been achieved.

Based on this, financial and accounting business integration, information management system, risk early warning mechanism, high level of financial information management personnel, and responsibility cost control can play a good role in the development of enterprises. Analyzing the informatization construction of enterprise financial management is not only helpful to solve the related problems and obstacles but also provides new ideas for the future development and innovation of financial management and informatization construction.

Data Availability

The figures used to support the findings of this study are included in the article.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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