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Retraction

Retracted: Application of Data Mining Technology in Enterprise Digital Human Resource Management

Security and Communication Networks

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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.

References

[1] D. Zhou, "Application of Data Mining Technology in Enterprise Digital Human Resource Management," *Security and Communication Networks*, vol. 2022, Article ID 7611623, 9 pages, 2022.

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Research Article

Application of Data Mining Technology in Enterprise Digital Human Resource Management

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The purpose of this paper is to explore the practical application of big data comprehensive mining and analysis technology in the overall human resource management work of the entire enterprise under the gradual increase in the amount of enterprise data, so as to effectively improve the overall core strategic competitiveness of the entire enterprise and improve the overall human resource management level of the entire enterprise. This article adopts the risk management theory of quantifying the characteristics of business management data, analyzes various management models in modern human resource information system management, and analyzes the entire process of modern enterprise daily operation and various types of human resource system risk management and business data. Combined with quantitative management theory, it introduces the basic concepts of business data feature mining system theory and its most common six data analysis and calculation methods. The module design examples are organically combined, and the traditional data mining analysis theory and its application are extended to the enterprise human resource project management information system. Finally, the experimental results show that the use of big data mining and analysis technology can solve the problems of human resource quality management in small- and medium-sized enterprises. The independent quantitative data mining analysis model has achieved 25% improvement in the application effect of the analysis of the types of human resources in management enterprises, the prevention of internal talent loss in management enterprises, and the performance evaluation management system of enterprises.

1. Introduction

Since China formally joined the WTO, its leading position in the Chinese market economy has gradually become known and recognized by the social world [1]. The market competition among enterprises is becoming fiercer and fiercer, so how to use the market advantages of enterprises to allocate resources has become more important. The market competition of enterprises is actually the market competition of professionals. In the daily management business activities of the manager of the human resources department of an enterprise, such as managerial career development and skill training, position level setting, salary ratio distribution, performance appraisal, employee skill promotion, and other employee responsibility rewards and punishments, they are traditionally used daily. The continuous accumulation of corporate surface management information data in corporate management is used to accurately implement corporate decision-making, so that in large corporate organizations, the proportion of wages is unevenly distributed, the performance appraisal is not effective, brain drain and low employee job satisfaction, HR management is often in a passive position [2]. How to effectively realize the real-time dynamic and efficient management of enterprise human resources in China's modern enterprise human resources business management; how to transform various forms of training, employment, unemployment, reuse training, reemployment, selection, elimination, and comprehensive utilization into one management system; etc. require a lot of management information [3]. Since the current traditional type data analysis and query methods can generally only directly obtain the external surface structure information of these types of data but cannot directly obtain the internal data attributes and implicit data information, it is necessary

to change the concept, explore the use of data mining theory. The technology intelligently and automatically analyzes these raw data so that a large amount of data information can be used effectively [4]. This paper studies the application of data mining in enterprise human resource management, mainly to find valuable knowledge in human resource management through a large amount of data information, guide practical work, and improve enterprise competition in the market [5].

There are many scholars who have provided references for the research on enterprise human resource management. Massaro et al. and Gaber et al. emphasize that companies cannot pay attention to their market forecasts and development plans for talents, there is serious brain drain, the development of human resources market economy is not perfect enough, talent training is ignored, and effective talent incentive mechanisms are really scarce [6, 7]. Joseph SIT analyzed what kind of value orientation the internal culture of a coal enterprise should have in a good coal enterprise, and then analyzed and put forward some targeted guidance measures to strengthen the internal cultural image of the coal enterprise and the internal human resource culture of the enterprise [8, 9]. Romero and Ventura analyze the three major difficulties and development status of human resource training and management of coal enterprises and propose specific solutions and specific management strategies. This paper systematically analyzes and deeply evaluates the current development status of the grassroots talent team of large state-owned coal enterprises and puts forward some policy suggestions to stabilize and continuously strengthen the coal talent team [10]. The article by Cominola focuses on the important humanistic and social values of enterprise human resource management, puts forward various management issues for state-owned enterprises and their owners in the internal human resource management of enterprises, and puts forward some questions about them [11]. Decompose the overall strategic goal management of an enterprise into more specific management personnel work, and grasp the key to realize an enterprise's strategic goals while always maintaining the reliable and sustainable core competitiveness and advantages of the enterprise. Saura and Bennett state that the army can be divided into multiple strategic levels, management level and enterprise operation level. The strategic planning level mainly includes corporate leadership team development strategic plan, human resource team development strategic plan, and corporate organizational capacity development strategic plan [12]. Alloghani et al. recommend that we not only focus on preemployment education, postemployment continuing education, and vocational continuing education, but also organize the on-the-job vocational training of trainees in several stages and at several levels to improve the work skills of trainees, vocational training assessment work skills, and the quality level of on-the-job training [13–15]. These studies have incomplete experimental data, and the conclusions have yet to be investigated, so they are not suitable for popularization and promotion.

Data mining application technology analysis is an effective technical means that is ubiquitous in the collection and mining of massive enterprise data [16, 17]. Its wide application in the process of enterprise human resources management is mainly reflected in the collection, analysis, and information processing of employees, and related personal information of large enterprises [18]. They can also help unearth information hidden in deep data. Based on this, in view of the two main problems in the practice of modern human resource data management, this paper introduces a new technology of data mining in detail from the aspect of modern human resources data management [19, 20]. Taking some economic measures, such as retaining some potentially important corporate employees, can be considered to greatly reduce the economic losses of these companies. Second, cluster analysis is performed on the data types of the existing degree certificate evaluation system using the calculation method of cluster analysis, and Shenyang Digital Co., Ltd. divides the degrees into different types through the calculation method of cluster analysis according to the existing degree evaluation data. Assessing categories, companies in different environments should use different methods in different categories, so that employees can feel the company's care for them, to increase the enthusiasm of employees and thus enhance the cohesion of the company. Finally, this article summarizes the research content, points out its shortcomings, and looks forward to the future research directions.

This article first discusses the content and current situation of human resource management information system, analyzes the main problems faced by human resource management information system, and introduces the application and research status of data mining technology in human resource management information system. Currently, there are two problems in human resource management: First, the employee turnover rate is high, and the company does not know which of the existing employees has the intention to leave. Second, the company uses the degree performance appraisal method to assess employees and obtain various types of appraisal data, but there is no effective method to analyze these data effectively, and they cannot support the company's strategic decision-making.

2. Related Technology Introduction

2.1. Fuzzy Decision Tree Algorithm. At present, there are many algorithms based on decision tree learning, but the core algorithm still adopts a top-down approach, that is, using a greedy algorithm to search the entire decision tree space. The most successful algorithm using this algorithm idea is the ID3 algorithm, which was proposed by machine learning researchers in 1986. It is a decision tree learning algorithm based on information gain. Since the algorithm was proposed, it has been widely used in various fields; the main application fields of ID3 algorithm are machine learning and natural language processing, but in the application process, it was also found that the ID3 algorithm was not perfect, which led to the research boom of decision tree learning algorithms. The improved algorithm is C4.5. This algorithm not only inherits the advantages of ID3, but also improves its defects. The biggest difference is that C4.5 is

based on information acquisition rate. This section mainly introduces a comparison between ID3 and C4.5.

2.1.1. Attribute Selection Measurement. The attribute selection metric refers to the criterion of selection split, which determines which attribute can be classified best. For the purpose of the classification algorithm, the higher the purity of each partition, the more ideal it is. Therefore, the attribute with the best metric is taken as the decision point. ID3 and C4.5 use information gain and information gain rate as their attribute selection metrics, respectively. The biggest difference between these two algorithms is the attribute selection metric.

2.1.2. Information Entropy. Entropy was originally a thermodynamic concept. It was interpreted as the expectation of the occurrence of random variables and used to describe the uncertainty of unknown information. The definition of entropy in information theory is as follows: if there are multiple events in system S, then $S = \{E_1, \ldots, E_n\}$, the probability distribution of each event $P = \{p_1 \ldots, p_n\}$, and then the amount of information is single. The meaning of the event is as follows:

$$I_e = -\log_2 p_i. \tag{1}$$

Then, the entropy of the entire system is as follows:

$$H(x) = E(I(X)) = \sum_{i=1}^{n} p(x_i \log_2 p_i). \tag{2}$$

For classification problems, the "category" is equal to the random variable S, the probability of a category is equal to P, and n represents the total number of categories. Then, the entropy of the classification system can be expressed as follows:

$$H(c) = \sum_{i=1}^{n} p(c_i \log_2 p_i), \tag{3}$$

where C represents the category set and c_i represents a value of the set C.

2.1.3. Information Gain and Gain Rate. Information gain is used to describe the change of information entropy. Suppose the elements in D are divided according to attribute A, attribute A has m different values $\{a1, a2, a3, \ldots, am\}$, and then D is divided into M subsets $\{D1, D2, D3, \ldots, Dm\}$. We always hope that the purity of each division is the most ideal, so the basis of judgment is how much information is needed after division, that is, the information entropy after division:

$$H_A(D) = \sum_{j=1}^{m} \frac{D_j}{D} \times H(D_j). \tag{4}$$

It can be seen that the smaller the $H_A(D)$, the more ideal the division, and the higher the purity.

The definition of information gain is the difference between the information entropy before division and the information entropy after division; namely,

$$\text{Gain}(A) = H(D) - H_A(D). \tag{5}$$

Among them, Gain (A) refers to the information gain after attribute A is divided; that is, the greater the information gain, the higher the purity of the division.

The standardized information gain of the gain rate overcomes the shortcomings of information gain. The department is pure, and the information obtained is as follows:

$$H_A(D) = 0. \tag{6}$$

The information gain is the greatest. However, such a division is meaningless, because there is only one element under each division, so the classification is meaningless, or overfitting.

In order to correct the above offset, we introduce split information to standardize the information gain, which is defined as follows:

$$\text{SI}_A(D) = -\sum_{j=1}^{m} \frac{|D_j|}{|D|} \times \log_2\left(\frac{|D_j|}{|D|}\right). \tag{7}$$

This formula expresses the information generated by dividing D according to attribute A, and each division corresponds to m values in A. Finally we define the gain rate:

$$\text{GainRatio}(A) = \frac{\text{Gain}(A)}{\text{SI}(A)}. \tag{8}$$

When the segmentation information approaches 0, this ratio will become unstable. In order to solve this problem, we need to add a condition that the information gain of the candidate attribute is not less than the mean value of all information gains.

2.1.4. Fuzzy Decision Tree Algorithm. For a particular thing, its structure is known, and then its set of factors U can be determined. The membership degree of each factor in the factor set U to the evaluation set V is obtained by the method of single factor evaluation:

$$r_{ij} = v_j(u_i), \quad (j = 1, 2, \ldots, n). \tag{9}$$

From (9), it can be seen that the fuzzy relationship vector between the factor U_i and the evaluation set V can be expressed as follows:

$$r_j = (r_{i1}, r_{i2}, \ldots r_{in}), \quad (i = 1, 2, \ldots m). \tag{10}$$

From (10), the result of individual evaluation of each factor U_i can be obtained, that is, the fuzzy vector of evaluation level of each factor. Combining the fuzzy relationship vectors between all the individual factors U_i and V, we can obtain the fuzzy relationship matrix between U and V sets, that is, the fuzzy decision tree matrix used in this article, as in the following formula:

$$R = \begin{pmatrix} r_1 \\ r_2 \\ \vdots \\ r_m \end{pmatrix} = \begin{pmatrix} r_{11} & r_{12} & \cdots & r_{in} \\ r_{21} & r_{22} & \cdots & r_{2n} \\ \cdots & \cdots & \cdots & \cdots \\ r_{11} & r_{11} & \cdots & r_{11} \end{pmatrix}. \quad (11)$$

Since the weight of each element in the factor set U is often different in the evaluation process of things, in the comprehensive fuzzy evaluation, the influence of each evaluation factor on the evaluation result needs to be considered, that is, the size of the weight. Suppose the influence of the elements of the fuzzy decision tree factor set U on the evaluation result is represented by the following fuzzy vector:

$$\widetilde{A} = \begin{pmatrix} a_1 \\ a_2 \\ \vdots \\ a_n \end{pmatrix}. \quad (12)$$

The vector in (12) is the weight vector of things evaluation, where a_i represents the degree of membership of U_i influence on the evaluation and can also be regarded as a mathematical expression that only considers the influence of the evaluation factor U_i on the evaluation result.

2.2. Data Mining Technology Introduction

2.2.1. The Concept of Data Mining.
Whether it is normal work or daily life, people will never do without the convenience of using computers [21, 22]. However, the massive user data generated by the user in the process of using it still has great commercial development and application value. Therefore, people very much hope to analyze this geographical information accurately, effectively, and reasonably and use the results of these analyses effectively and reasonably through a certain scientific method. Under this urgent market demand, new technologies such as data mining have emerged [23, 24]. Data mining related technology research involves many specialized disciplines and professional fields. From the perspective of professional technology application, data mining technology is a process of mining a large amount of unknown professional knowledge and sensitive information hidden in it through data analysis of a large amount of professional data automation. In fact, the research objects of data analysis and mining are often the basic characteristics of very large-scale, rapidly growing, and diversified functions.

2.2.2. Current Status of Data Mining.
"There is a huge amount of data, but little information is available," which is an embarrassment that most online financial service companies often face. In the current industry environment, most of the underlying databases that the financial industry needs to implement can only directly implement some underlying data functions such as input, query, and statistics of the upper database, and it is impossible to automatically find

various useful financial pieces of information from these data [25, 26]. As a kind of industrial application analysis technology, data mining technology can be accurately said to cover a wide range of applications. Especially in developed countries, the application of new technologies such as data mining is more and more complicated. The data in the network already includes not only network images and digital texts, but also other data streams and other digital streams. It can be said that data mining will definitely become a very important area of economic growth in the next few years, and the application of data analysis and mining technology will become more and more extensive in the future. The research and analysis results show that the data volume of the processors used by enterprises will increase rapidly year by year to a certain extent, reaching a very surprising level of change. Most software companies have hardly encountered the security problem of insufficient data. Excessive duplication and inconsistency of databases can cause a large number of problems. This makes many companies encounter many problems in how to use and effectively manage these massive data in the execution of corporate decisions [27, 28].

2.2.3. Data Mining Application.
Because enterprise data mining technology can effectively analyze the useful and specific information in enterprise data collection and bring huge political, economic, and social benefits to the entire enterprise organization, mining and analysis technology in big data has become more and more popular. Retail store managers need to accurately analyze and forecast the average sales volume of commodities in the next few years to effectively reduce inventory management costs. Using the latest data mining analysis technology, inventory management costs are only reduced by 3.8% compared with the original inventory level costs. For HSBC, we need to accurately classify the needs of the rapidly growing target customer base, find the most expensive target customer for each new product plan, and reduce product marketing management costs by 30% through the widely used big data mining and analysis technology. Every year, the US Department of Defense Finance needs to quickly find the most likely various fraudulent transactions among millions of fraudulent arms transactions and treat them using its big data mining analysis technology. Conduct in-depth investigations, effectively saving a lot of commercial investigation costs.

2.3. Application of Data Mining Technology in Enterprise Human Resource Management.
In modern machine intelligence learning, the decision tree model is a linear predictive function model; it can represent the linear mapping function relationship between the given attribute value of the object and the attribute value of the given object. Each leaf node in the tree structure abstractly represents a node object, the path of each node branch tree abstractly represents a possible object attribute parameter value, and each leaf child node abstractly corresponds to a child that may have the above two attribute parameter values. The decision tree module has only one type of output; if you need multiple types of output

at the same time, you can consider establishing an independent decision tree module to process different single outputs at the same time. Each decision tree represents a decision tree classification structure, and each branch of it classifies the decision object structure of the structure type according to the classification attributes. The decision tree can be constructed directly using the probability function based on the conditions in the calculation. Decision tree analysis adopts new mathematical calculation and analysis methods so that you can quickly obtain more ideal decision results.

(1) According to the theory of human resource economics, in reality, some social capital economic management activities of human beings can always be directly described and recorded in the form of economic data; the technical construction of data warehouses and the modeling technology of data mining libraries are the two key technical elements in the construction of enterprise value chain for enterprise data warehouse mining. Generally speaking, data mining mainly has the following six statistical methods: structure description statistics, association and interaction correlation, classification and comprehensive clustering, prediction, optimization and processing of structural analysis equations and modeling.

(2) It is precise because the basic characteristics of enterprise human resources are the necessary conditions for enterprises to form their own irreproducible core competitive advantages, so according to the functional modules of enterprise human resources management, different companies need to classify the abilities of all employees and conduct a comprehensive analysis of their attributes. To sum up, the general Chinese corporate recruitment human resource control management model can be roughly divided into the following five main modules: corporate recruitment mechanism management, turnover mechanism management, performance mechanism management, salary mechanism management, and training mechanism management. Different corporate human resource decision-making management system modules can have different corporate decision-making management attributes. These decision-making attributes can form a decision tree, analyze and collect human resource management data, and provide management basis for carrying out corresponding management decision-making activities.

(3) Basic information classification attributes are gender, age, education level, and region.

(4) Recruitment module classification attributes are professional knowledge and skills, professional positioning, behavioral personality, language organization and expression ability, team spirit, and initiative.

(5) The classification attributes of the resignation module are benefits, job accomplishment, self-development, fairness, interpersonal communication, identity, etc.

(6) Performance module classification attributes are performance plan, performance commitment, and performance indicators.

(7) The classification attributes of the salary module are department, key positions, job evaluation elements, weights of job evaluation elements, salary levels, title levels, and salary ranges at all levels.

(8) The classification attributes of training modules are the division of training objects, the skill mastery of trainers, the division of organization and job types, training costs, and training types.

The concept of rough set can effectively abstract the objective environment or abstract external environment into an information system, also known as an attribute-value system. Attribute setting is usually divided into two groups; C and DC represent attribute settings, D represents the decision attribute set, $A = C \cup D$, and the requirement is $C \cap D$, that is, the degree and importance of dependence, C and D. Finally, the highest attribute information gain value is obtained according to the calculation result to obtain the decision attribute. Combining the above theories, we can define the classification attributes of all modules of human resources as attributes to complete the settings, and the label attribute selected by the research module of any classification attribute is set to C, and the other classification attribute modules are used as the decision attribute set, and then the corresponding analysis is carried out to obtain the decision attribute module.

3. Experimental Conditions and Procedures

3.1. Experimental Data Acquisition. The data in this article comes from the talent information database of the human resource network. Due to the large amount of historical data in the talent pool, various types, and complex structures, it is necessary to filter the extracted data to ensure the quality of the data. The principle of selection is as follows: the extracted data can reflect the macro connection between job seekers, and the job seeker information must cover people of all backgrounds; in order to reflect the recent trend of job seekers' job selection, attention must be paid to the freshness of job information. The degree, release time, and delivery time are as close as possible to the current time to improve the accuracy of mining rules. According to the above requirements, we choose to represent the data tables in the talent information database, including the basic information table of applicants, the professional skill information table of job applicants with educational experience, the position delivery record table of job applicants, this position information table, and the company information form.

3.2. Experimental Conditions and Control. Since most statistical analysis techniques are based on strict mathematical theories and highly skilled application techniques, it is difficult for general users to easily master them. If an enterprise wants to achieve the purpose of data mining through relatively simple learning and understanding, then it needs to

rely on combining the business logic of a specific industry to implement data mining on the business application platform. The experiment in this paper is carried out on a high-performance computer, using SPSS 22.1 as the statistical software and PyCharm as the model database and preprocessing software for data preservation and preprocessing.

3.3. Experimental Steps

(1) Clarify the mining goals, consider the actual situation of the enterprise's human resource management, and understand the relationship between the above attributes and whether or not to leave based on the title and education of the employees in the enterprise. Investigate employees who may leave from within the enterprise and actively adopt incentive measures for potential leavers, such as raising salaries and changing jobs, to retain professional talents, reduce losses caused by brain drain, and improve the stability of the enterprise workforce.

(2) Prepare to mine data, and clarify employee resource connections based on the data provided by the human resource organization

(3) Substitute the prepared data into a mature model for experimental verification and comparison.

4. Experimental Comparative Analysis

4.1. Establishing a Comparison of Decision Trees for Job Search Tendency Analysis

(1) The data selected in this article comes from the talent information database of the human resource market information platform, where there are 19 attributes of "job-seeking tendency," with "gender," "age," "educational background," "political status," and "marital status" as decision-making attributes. This section randomly selects 2000 job search records as a sample. These job search records are as close as possible to the current time, including 1,645 job applicants and 471 positions. We use 80% of the data as the training set and 20% of the data as the test set. The data distribution is shown in Table 1, and the experimental analysis is shown in Figure 1.

(2) Confidence is an important indicator to measure the quality of generated rules, and it reflects their accuracy. In the C4.5 algorithm, the default value of confidence is 25%. If you use the default value, too many rules will be generated and the quality of the rules will be uneven. Depending on the specific situation, the recommended confidence level is between 60% and 80%. In other words, the rule is considered effective only when the confidence level is greater than the threshold, as shown in Table 2.

The degree of improvement is an indicator to measure the reliability of the generated rule, and the intuitive meaning is the correlation between the rule and the target category. Therefore, the degree of promotion is introduced to further control the quality of the generated rules. An

TABLE 1: Comparison of data distribution.

Age						
18–25	25–30	31–35	36–40	41–45	45–50	>50
661	772	295	142	60	40	23
Education						
Undergraduate (L)		Undergraduate (M)		Undergraduate or above (H)		
988		898		164		
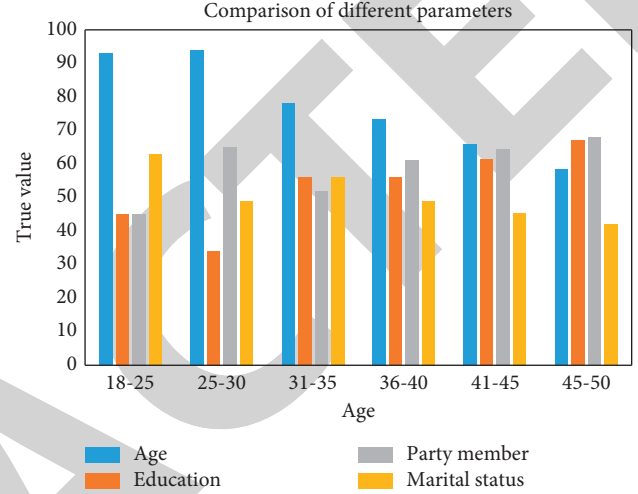
FIGURE 1: Comparative analysis of experiments.

TABLE 2: Adjustment of execution parameters.

Age	55	45	65
Education	45	56	70
Party member	50	60	74
Marital status	67	56	52

improvement degree less than 1 is a negative correlation, indicating that there is a mutually exclusive relationship between the two; a degree greater than 1 indicates a positive correlation, indicating a certain relationship between the two. In general, as long as the degree of improvement is greater than 1, it can be shown in Figure 2.

4.2. Exploration of Using Data Mining Technology in Human Resource Management

(1) In today's market environment, most companies have begun to improve their human resource management level and have established a relatively complete management system and data management system. However, in actual work, the collected relevant data is often only used for corporate report statistics or daily data retrieval, and it is impossible to "dig" the value of the data and apply it to human resource management, as shown in Figure 3.

(2) The establishment of a brain drain risk management data center in large enterprises requires in-depth data analysis and risk management. First of all, we must consider establishing a perfect corporate brain
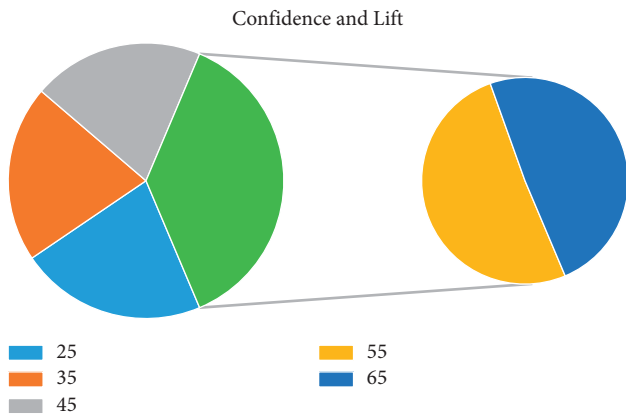
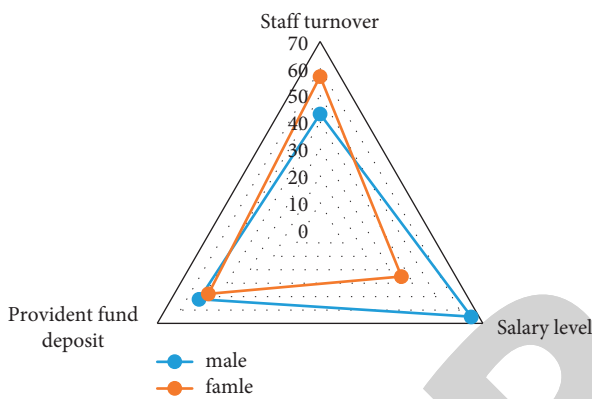FIGURE 2: Comparison of confidence and lift.

FIGURE 3: Conceptual analysis of enterprise resource management.
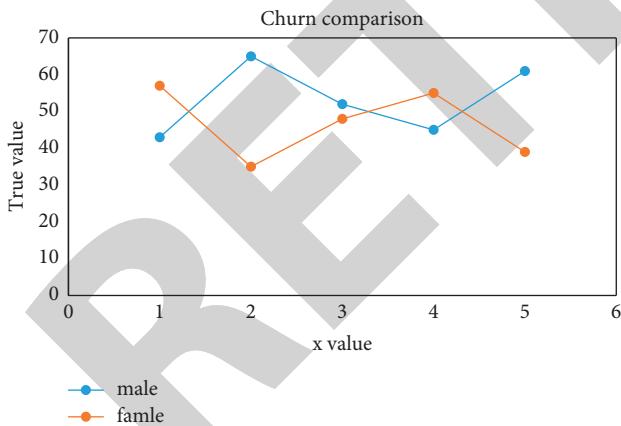

FIGURE 4: Analysis of the reasons for employee turnover.

drain risk management mechanism. It can effectively avoid the loss of corporate talents and can effectively reduce the large amount of unnecessary human management fees and capital investment in the human resource management of small- and medium-sized enterprises. Use the corporate brain drain tracking management mechanism to track and analyze the specific resignation basic information of each resigning manager, and organize it into a resignation form, as shown in Figure 4.

5. Conclusions

In summary, the gradual analysis and research of the practical application of new technologies such as big data analysis and mining in China's human resource quality management industry will help gradually enhance the internal core competitiveness of the entire Chinese enterprise. Through the introduction of these relevant practical application cases, the effectiveness of enterprise human resource talent management can be significantly improved, more and more outstanding talents that are more suitable for the current strategic development of internal enterprises are recruited, and internal enterprise human resources can be rationally allocated to retain more excellent talents in enterprises and reduce the cost flow rate of enterprise human resources. Therefore, great attention should be paid to the full promotion and application of new technologies such as big data analysis and mining in the internal human resource quality management system of Chinese enterprises in order to effectively promote the stable and healthy development of the entire Chinese enterprise. Data mining analysis technology can indeed play a leading role in an enterprise's long-term human resource operation and management. Using this information technology platform can effectively improve the talent management system of small- and medium-sized enterprises, helping them to establish and improve the risk prediction and evaluation mechanism of layoffs and resignation as soon as possible, rationally allocate human resources, and reduce excessive waste of human resources.

Human resource professional management technology has a relatively easy to understand and broad interpretation. It refers to the use of various modern scientific technical methods by enterprises to deal with various related enterprise human resource issues that are common within and outside China's enterprises. It is reasonable and scientifically important. Data mining analysis technology has always played an important guiding role in the development of an enterprise's long-term business strategy and the entire business process, providing valuable professional knowledge for an enterprise's senior business management decision-makers, so that enterprises can obtain greater market profits and unique market competitiveness and advantages. The great importance of enterprises in promoting the national economic and social development directly determines the great necessity of introducing enterprise data mining technology into Chinese enterprises for human resource management. In view of this, this article puts forward the specific strategy of directly integrating enterprise data mining application technology into modern coal enterprise internal human resource quality management information system. The in-depth research and promotion of this management technology have improved the level of human resource management in enterprises, which can greatly enhance the corporate image, make the company stand out in the complex economic society, and create high economic value. Therefore, it has important technical practical significance and broad international application development prospects.

In the reality of the enterprise, the purpose of its work is mainly to give full play to the various subjective initiatives of enterprise people through the organization to carry out long-term and effective vocational training; organization and reasonable deployment of enterprise human resources; and appropriate passive induction, control, and active coordination to change people. The various thoughts, psychology, and social behaviors of the company can fully meet the current and future corporate development strategic needs of the corporate organization and ensure the realization of corporate strategic goals and the maximum benefit of the common development of all members. In this era of knowledge economy development, human resources gradually develop beyond the material production resources of enterprises and enterprise financial management resources and become the important core resources of modern enterprises. Various important key technologies of data analysis and mining also help to effectively analyze and control the processing of massive data, discover the deep data relationships and knowledge between and behind the data, and support and help enterprises in making correct decisions. Therefore, data mining technology can be used to study and explore the business process of an enterprise and provide valuable knowledge for the business decision of the enterprise, so that the enterprise can obtain greater profits and unique competitive advantages. This study uses a small amount of data in the experiment, and the experimental results are not very explanatory, so it is recommended that the experimental data amount be expanded in future research.

Data Availability

The data that support the findings of this study are available from the author upon reasonable request.

Conflicts of Interest

The author declares no conflicts of interest.

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