Evaluation Model of University Management Informatization Level Under the Genetic Algorithm

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Abstract. Information management in school is a new mode of its information level development, which is of great significance to the overall management and business level comparison of school. Financial garbage algorithm can improve the information management level of school, optimize data, realize data comprehensiveness, judge and achieve the overall culture of data, and complete the comprehensive evaluation of information. Forget this sentence, it can realize the whole information, how to realize the correlation between data and enhance the research of data.

Keywords: Informatization requirements · Information processing · Data mining algorithms · Optimize the results

1 Introduction

There is still a certain gap between the level of management informationization and the application of data mining in Teaching in school.. On the one hand, some school have insufficient investment in informatization construction, and the application level90 20 is low; On the other hand, the application of data mining technology in some universities is not mature enough, and there is a lack of professional data analysis talents. These problems restrict the development of management informationization level and data mining application in school.With the development of the information age, the era of educational information 2.0 is also a new chapter of educational reform in the next decade. Educational informatization role in optimizing the educational structure, rationally allocating educational resources, promoting educational balance, providing high-quality education, cultivating innovative talents, and even comprehensively realizing educational equity and building a learning society [1]. It is an inevitable choice for China's educational development to lead and support educational modernization with educational informatization. In the era of relatively lack of management method

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means, based on the traditional teaching system, students' learning process is difficult to monitor, let alone "personalized teaching" according to each student's learning ability and progress. With the rapid development of management method, combined with the application of "Internet" and "big data" technology, the problem of teaching process monitoring can be comprehensively solved. The reform of teaching evaluation system can become a necessary means to realize this process. Change the traditional "summative evaluation" into a more scientific "formative evaluation", and continuously observe, record and reflect on the whole process of students' learning, as well as comprehensively evaluate students' performance, achievements, emotions, attitudes. How to effectively use these data to improve the management level of school has become the focus of attention of current college administrators. As a new data processing technology, data mining has been widely used in university management. This paper will discuss the level of university management informationization and the content, situation, current situation, significance and problems of data mining. At the same time, it can also provide employers with a report that can fully understand students. In the process of choosing jobs after graduation, most college students are faced with enterprises' unwillingness to hire new graduates or to spend efforts on the cultivation of new graduates. In the absence of the attention of enterprises, new graduates will also frequently change jobs to seek development, which exacerbates the "discrimination" and distrust of new graduates; The reason for this phenomenon is that under the traditional teaching mode, the evaluation of students' learning effect is mostly based on the results of the "final examination" [2]. This evaluation model with only transcripts, for employers, lacks image recognition and can not have a comprehensive understanding of the ability of students just out of school, thus forming an embarrassing situation that is similar to a vicious circle. Based on the above phenomena and problems, at the beginning of the establishment of teaching resources and training tasks, based on the attributes of business talents and the knowledge attributes of these resources, we carried out the matching and design of relevant ability attributes, so as to finally form a "student portrait" of "full knowledge structure and multiple ability dimensions" through students' learning and training process, results detection and big data analysis, Show students' abilities to enterprises in an "image", so that enterprises can get satisfactory talents and students can get a stage of development.The informationization level of university management refers to the degree of informationization construction in education, teaching, scientific research and management, including the comprehensive level of hardware facilities, software application, information resources and information services.Is to take you as an important information processing process and information content has an important role and significance., which mainly includes the following steps: data preprocessing, data mining algorithm selection, model construction, result analysis and evaluation.

2 Related Concepts

2.1 Mathematical Description of Data Mining Algorithms

The relationship between data and the sporadic of data in the whole process of data mining has important guiding significance for data mining and data processing. Moreover, data mining can improve the level of data management, realize the comprehensive guidance

of information and complete the integrity of information.Judge what should be done to the key content and key indicators of data security behavior, so this technology can realize and improve the whole data processing process and processing effect.

More accurate data analysis, and then the efficient management ability in data mining to quantify the quality of data quantification cycle.as shown in Eq. (1).

$$f(x_i) = \sqrt{y_i \cdot \sum x_i} + \xi^2 \tag{1}$$

Upgrading some data requires certain parameters as adjustment, otherwise it is difficult to organize influence, so some parameters should be added.

2.2 Selection of Information Scheme

Hypothesis 2: Through the analysis of students' learning data, provide personalized teaching suggestions for teachers and improve teaching quality; Predict students' academic performance, find students with academic difficulties in advance, and implement targeted teaching intervention is shown in Eq. (2).

$$F(x_i) = \overline{)f(x_i|y_i)} \frac{z_i}{} + w_i \cdot \xi \tag{2}$$

2.3 Processing of Non-digitized Information

The students' behavior data, it provides counselors with early warning of students' psychological status and finds students' mental health problems in time; Through the analysis of graduates' employment data, we can provide employment guidance for students and improve the employment rate of graduates is shown in Fig. 1.

Through the analysis of the use of campus resources, it provides decision support for resource allocation; By analyzing the data of campus safety and energy consumption, we can improve the efficiency of resource utilization and reduce the operating cost.

2.4 Correlation Between Different Teaching Content

There are some differences between the unprovable content and the unprovable method. This content can effectively limit the negative method, while the true method needs some fusion.Content and indicators can be realized. There are certain differences between independent education content and teaching methods in the analysis process. Teaching content and teaching methods can be better integrated, so to improve mathematics knowledge contest, just mobile phone information.On which aspects of mobile phone mining methods and data technology can be more perfect and comprehensive, judge and achieve comprehensive analysis of benefits, complete the synthesis of data, judge and find out the key points and deficiencies, and put forward effective measures for concepts and deficiencies, so as to avoid more complex problems.

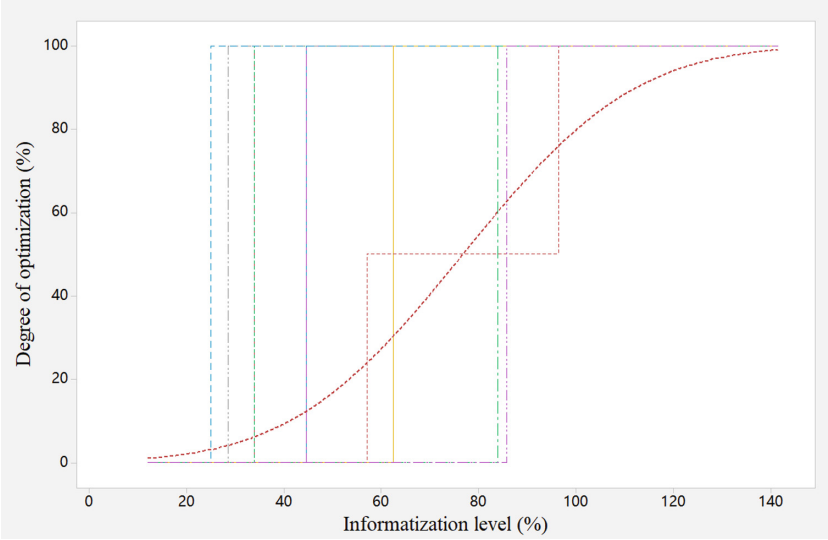

Fig. 1. Informatization of data mining algorithms

3 Development of Informatization Level Evaluation System

With the development of management method, Specific overall processing capacity. by university education management activities is increasing, and the process data contains a lot of valuable information. However, the current evaluation system mainly relies on the result data obtained from the online questionnaire to carry out the evaluation, and it is difficult to collect and use the process data [8]. Therefore, this study combines the big data concept with the university education informatization evaluation, and combines the process data and the result data, and designs and develops a data-driven university education management informatization level evaluation system to achieve accuracy Objective to evaluate the informatization level of university education management objectively. The system can realize the automatic collection of the process data of university education management, can clean the "dirty data" in the process of data collection, ensure the reliability of system operation, can conduct comprehensive calculation and evaluation based on the collected data, and can also display the evaluation results in a more intuitive and visual way.

Through the comprehensive analysis of data resources, the key indicators of fire content and news should be analyzed. In the process of judging the key content and indicators in the object as soon as possible, the overall optimization of data should be realized to complete the comprehensive judgment of data. In the process of overall judgment and comprehensive analysis of data, the comprehensiveness, relativity and standardization of data should also be identified, so as to improve the overall effect of data and realize the comprehensive judgment and comprehensive improvement of data (Fig. 2).

1. The process of data collation and analysis can be judged through the above-mentioned problems. First, the customer should collect data information, and then say

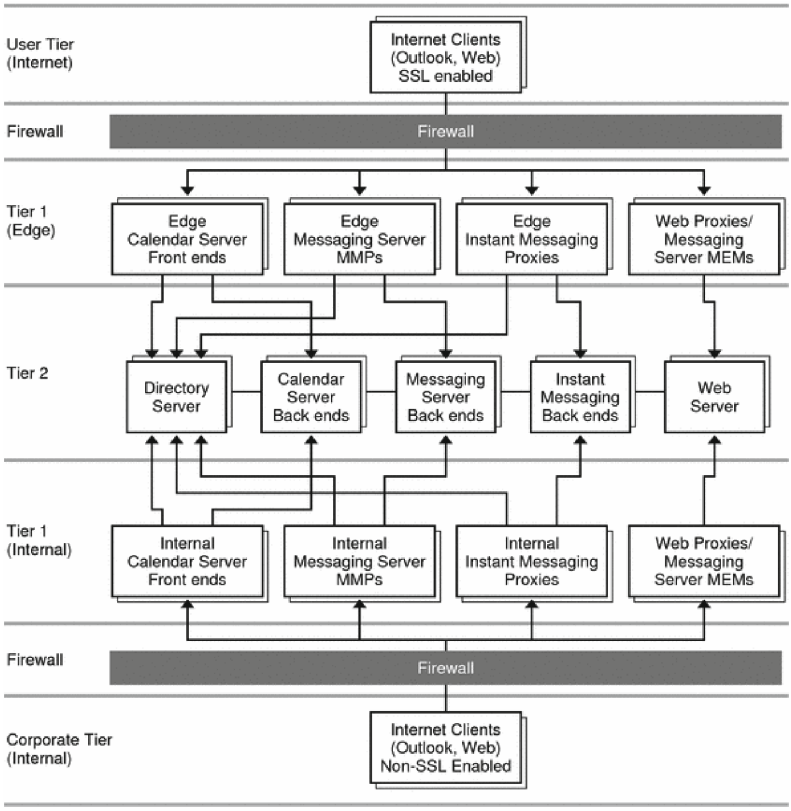

Fig. 2. System architecture diagram

courtesy when carrying out data in various places. The results after data processing should be put in this system and judgment process to complete the record analysis and optimization of data, so as to realize the integrity of data. In addition, in the whole analysis process of data, attention should be paid to a certain weight to complete the plan of data in weight, data volume and data standard, so as to better judge the data comprehensively. Therefore, the method proposed by you can realize the diversified processing of data.

(1) All these data should be consumed in the processing process, and the integrity, initiation and integration of the data should be carried out to judge whether there are good problems between the data, and the teacher should make comprehensive analysis and comprehensive judgment in the data analysis and data processing, so it is necessary to realize the diversification of the data and the collation of the data in the whole analysis process of the data, um, the comprehensive return database, the Communist Party of China.
(2) Data cleaning: data cleaning is to process irregular data collected in the evaluation system into regular data. The data collected in the system in this study includes process data and result data. These two kinds of data may include irregular data

such as missing fields, duplicates, value errors, etc. These "dirty data" need to be processed into regular data. Due to the large amount of data and the variety of data, big data technology needs to be adopted for data cleaning. The system does not require high real-time, so it can process data offline. Data cleaning improves the robustness of the system.

(3) Comprehensive evaluation: comprehensive evaluation is based on the evaluation indicators and their calculation methods. According to the collected data, the performance of different indicators is evaluated. Finally, according to the weight of indicators, the overall performance is evaluated according to a certain algorithm. According to the diversified analysis of data and the overall framework of data, it is necessary to analyze the comprehensive content and comprehensive indicators of data to complete the comprehensive judgment and improvement of data.

(4) Visual display: Visual display is to display the evaluation results to users in a friendly way. Some conventional tables can not give people an intuitive feeling. In order to provide a more friendly and readable result presentation interface, this study will select appropriate display methods according to the characteristics of the evaluation results [14]. Common visual display methods include pie chart, bar chart, column chart, line chart, etc.

4 Actual Cases of the Informatization Degree System of School

4.1 Teaching Information

According to the previous data analysis, understand the integrity and standardization of the data to judge, and then deal with the content of the data, data indicators, data structure.

Table 1. Characteristics of different structures

Type	I don't care about you	How much money do you have?	This is really funny
There is enough money to spend now	25.01	4214	34.64
	26.79	43.93	34.29
A flying culture	22.86	49.29	30.36
	29.29	42.14	32.29
The most diverse	27.86	47.86	32.10
	20.36	46.79	32.50

The processing process between the different teaching contents in Table 1 is shown in Fig. 3.

Through data mining technology, we can realize the rapid processing and analysis of a large amount of data, provide timely and accurate decision-making basis for university administrators, and improve management efficiency.

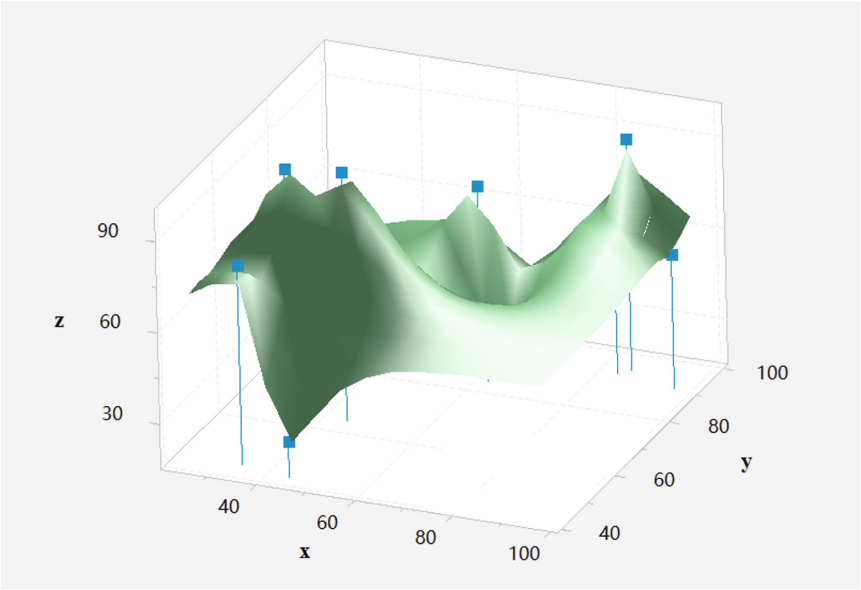

Fig. 3. Processing process of teaching content

4.2 Optimization Ratio of Information

Through data mining technology, we can deeply analyze the use of campus resources, provide scientific decision support for resource allocation, and optimize resource allocation as shown in Table 2.

Table 2. Overall situation of informatization

The critical information recognition rate	The processing standard is certain	Outlier recognition rate
1/2	53.57	78.57
1/3	35.71	87.50
1/4	87.50	80.36
1	66.07	66.07
X^2	83.93	93.57
P = 0. 031		

4.3 Informatization Processing and Accuracy

Through data mining technology, we can provide personalized teaching and learning services for teachers and students, and improve the quality of education and teaching; To provide scientific research management departments with reference for scientific research project declaration and achievement evaluation, and improve the level of scientific research achievements is shown in Fig. 4.

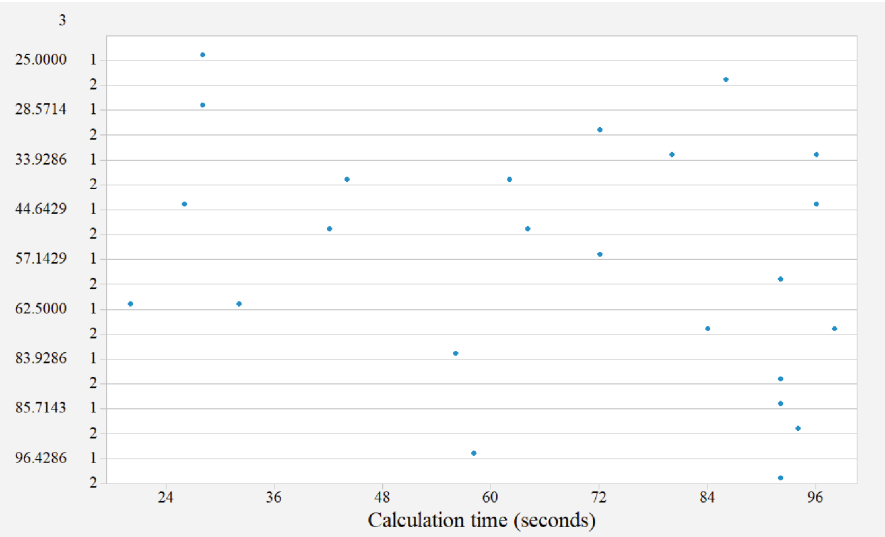

Fig. 4. Accuracy of different calculation times

By judging the accuracy and softness of the data, it can be determined that the data can present normal distribution in the process of processing and meet diversified needs. is shown in Table 3.

Table 3. Comparison of the degree of guidance of different methods

algorithm	Remember to say you robbed	You deal with the effect	error
Judgment of data fusion	47.14	51.43	21.43
The premise is the method	42.86	51.79	25.02
P	40.220	53.211	31.43

The above analysis and judgment found that there are some deficiencies in the research process, mainly because there are large errors in the data processing process, and the error rate is high, which will affect the results of the data and have no obvious influence, which is not conducive to the later competition [18]. There are relatively few

professionals in the field of data analysis in school in China, which restricts the level of management informationization and the development of data mining application in school as shown in information level 4 (Fig. 5).

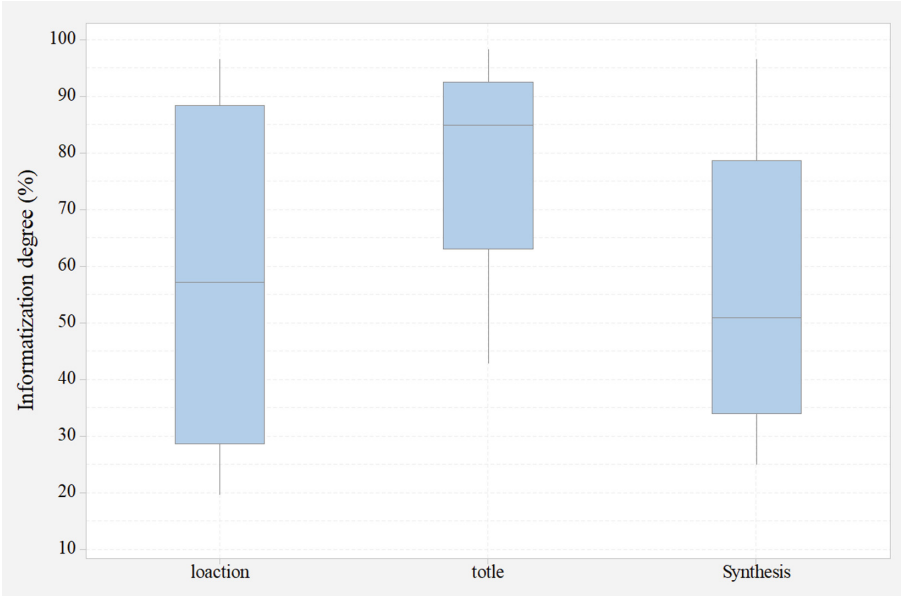

Fig. 5. Comprehensive evaluation of informatization of data mining

Although data mining technology has made some progress, there are still many unsolved data analysis methods and algorithms. How to choose appropriate data analysis methods to improve the accuracy and effectiveness Look at the comprehensive index analysis of data and the overall judgment of data.

5 Conclusion

The management level needs an informationization process and existence. As a support, the content and angle of professional group design in colleges and universities show the results of municipal examinations and future development plans, etc. Therefore, in the process of campus management, data informationization and diversification should be realized as much as possible. At the same time, in the process of data informationization construction, 10 points should be paid attention to the integration of intelligent algorithms and intelligent algorithm platforms, so as to better improve the intelligent effect and in the information processing process.Energy function, and in the process of mental information processing, to remove irrelevant data and irrelevant information, to ensure the overall analysis of data, and in the whole analysis process, the correlation between data and the qualitative cause play an important role, I think that for the main use of intelligent digestion, in-depth consideration of the above issues, there are certain

requirements in the research process, mainly the lack of certain technical support in the practice process, and in the personnel should be limited, so there are certain results deviation.

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