Research Article

Study on the Performance Optimization Algorithm Strategy of Resource and Environment Audit Based on Computer Network Technology

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In order to better control and repair resource and environmental problems, the state has invested a lot of manpower, material resources, and funds and issued corresponding ecological and environmental protection measures. As the national environmental supervision mechanism, the resource and environmental audit department is responsible for the supervision of national environmental governance. With the continuous development of computer technology, it brings convenience to resource and environment audit and improves the extraction of data processing, storage, and processing capacity. Because there are many departments involved in resource and environment audit, the cooperation between different departments will inevitably have errors. Using computer technology to mine the relevance of relevant data is conducive to the cooperation between departments. This study builds relevant algorithms and uses new technologies to collect data so as to improve the efficiency of audit work and better promote the construction of ecological civilization.

1. Introduction

The application of computer technology makes the work of data processing relatively simple. It not only improves the utilization rate of data but also optimizes the management of data resources and services. It allows computer technology to penetrate into various industries and has immeasurable economic value. After decades of development, the performance and service mode of computer technology have been improved and relevant cloud computing products and services have been launched, especially the resource and environmental problems that have attracted people’s attention in recent years. With the development of industry, the phenomenon of environmental pollution is serious, and some criminals have frequent incidents of illegal discharge in order to pursue economic interests, which have a certain impact on the living space of human beings and endanger human health. In order to audit the resources and environment, computer technology is used to audit the financial expenditure related to resources and environment of the government and relevant departments and enterprises related to resources and environment as well as whether the management is true and effective.

Xia Chu (2021) showed that in the early stage of industrial development, the impact on the environment was not paid enough attention, resulting in some phenomena endangering environmental resources and causing serious consequences. When people gradually realize that environmental problems seriously endanger the safety of human survival, the state put forward the governance measures of origin and established various competent departments to supervise and manage environmental problems so as to alleviate the contradiction between resources and environmental problems and people’s livelihood. Resources and environment audit is the main supervision department of resources and environment remediation and establishes the corresponding cooperation mechanism, which has improved the governance of environmental resources to a certain extent [1]. Li Jia (2022) research shows that ecological and environmental problems are related to the world, so
governments at all levels should pay attention to it and vigorously promote the implementation of resource and environment audit so as to give full attention to the immune system function of resource and environment audit and to truly implement it [2]. Zheng Honggang (2021) explained resource and environmental problems, which are increasingly prominent, and indirectly illustrated the importance of resource and environmental audit work according to resource and environmental problems, which is conducive to deal with and solves the current severe resource and environmental problems [3]. Li Zhaodong (2021) studied that ecological civilization construction is in a prominent position, and the importance of resource and environmental audit is constantly improving, and we need to better play the role of resource and environmental audit [4]. Wang Cao (2021) studied that to strengthen the construction of ecological civilization, audit supervision is indispensable. This paper deeply analyzes the necessity of resource and environment audit and improves the resource and environment audit [5]. Bai Chen (2022) explained that in view of the current environmental problems, the country attaches more attention to ecological environmental protection, and the government environmental audit is an effective measure to strengthen the national environmental governance capacity [6]. Therefore, starting from the problems existing in the development of China’s resources and environment audit, it is necessary to pay attention to the countermeasures to improve China’s resources and environment.

2. Feature Extraction of Resource and Environment Audit Data Based on Computer Network Technology

In order to highlight the governance of environmental resources, the state has established relevant competent departments to supervise environmental resources so as to strengthen the responsibility of environmental supervision, resource conservation, and environmental protection. At the same time, in order to assess the management effect of relevant departments on environmental resources, it has also established relevant audit departments to audit the results of environmental governance and the expenses incurred by relevant departments in the governance process so as to ensure the construction of ecological civilization and promote sustainable development. This department is mainly to focus on the cost and management of environmental and resource problems so as to effectively improve the effectiveness of environmental governance, alleviate the contradiction between the environment and people’s livelihood, and create a sustainable and healthy development and livable space for mankind. In order to supervise the effectiveness of governance and the management process, an audit department is specially established to supervise the supporting corresponding mechanism system and use computer technology to process and analyze the relevant data. The specific process is shown in Figure 1.

In Figure 1, with the development of computer technology, data processing and visual conversion are quite mature. People use their functions to analyze the data to be processed and get the corresponding results. Computer network technology will judge audit clues through images and graphics, provide audit basis, and conduct clue feature mining, which is conducive to risk control, to achieve the purpose of audit, and to improve the efficiency of audit.

The resource and environmental audit data extracted by computer network technology can mine valuable information from a large number of real-time dynamic environmental protection data by comparing graphics and images and quickly analyze and obtain the current situation, which is more accurate, real time, and efficient than the traditional audit data.

3. Efficiency Verification of Different Algorithms for Performance Optimization of Resource and Environment Audit

3.1. Analysis of Specificity and Sensitivity of Resource and Environment Audit Performance Optimization System under Different Algorithms

Gao Li (2019) has discussed the orderly development of ecological resources, which requires not only the supervision of ecological resources departments but also the strong supervision of the public on the utilization of ecological resources [7]. Chen Bilian et al.’s (2020) resource and environmental audit reflects human beings’ care and attention to resources and the environment. Now, big data technology can maximize the effect of resource and environmental audit [8]. Wang Qian’s study (2019) on resources and environment audit is of great significance to the construction of ecological civilization and the sustainable development of human society [9]. Shi Dingyuan (2021) showed that in today’s social development, human beings combine resources and environment with audit to form “resources and environment audit.” Resource and environment audit plays an indispensable role in stopping the deterioration of ecological environment. Therefore, the research system has become the focus of attention in the world [10]. In the process of optimizing the performance of resource and environment audit, it can better improve the construction of service ecological civilization and promote the sustainable development of ecology. Based on computer network technology, the specificity and sensitivity of the resource and environment audit performance optimization system under different algorithms can be analyzed and compared and Table 1 is obtained:

In Table 1, through the comparison data of the specificity and sensitivity of the system under different algorithms, it can be clearly seen that the resource and environment audit performance optimization effect under the application of computer network technology algorithm is higher than that under the application of conventional algorithm. It is considered that computer network technology is adopted in the performance optimization process of the system, and it can help to improve audit performance.

In order to better reflect the analysis and comparison results of the specificity and sensitivity of the resource and environment audit performance optimization system under
different algorithms, the data comparison results in Table 1 are visualized, and Figure 2 is obtained.

Figure 2 shows the comparison results of the specificity and sensitivity of the resource and environment audit performance optimization system under two groups of different algorithms. The results show that the resource and environment audit performance under the computer network technology algorithm is much better than the traditional conventional algorithm. After using the computer network technology algorithm, the resource and environment audit has higher specificity and sensitivity and better early warning ability. It is conducive to improve the performance optimization of resource and environment audit.

In Table 2, through the analysis results of the coupling degree of the resource and environment audit performance optimization system under different algorithms, it can be seen that the coupling degree of the resource and environment audit performance optimization system under the application of computer network technology algorithm is higher than that under the application of conventional algorithm, and the mutual integration effect of the coupling degree is also better, which is conducive to the system of optimizing the resource and environment audit performance.

In order to more intuitively reflect the coupling analysis and comparison results of resource and environment audit performance under different algorithms, the coupling comparison results of different types of computer network algorithms in Table 2 are visualized, and Figure 3 is obtained.

Figure 3 shows the analysis and comparison results of the coupling degree of the resource and environment audit performance optimization system under two groups of different algorithms. The coupling degree is 67.37% before using the traditional algorithm, 76.65% after using it, 82.42% before using the computer network technology algorithm, and 92.34% after using the computer network technology algorithm. Therefore, it is considered that the coupling degree of the resource and environment audit performance.
optimization system using the computer network technology algorithm is significantly higher than that of the resource and environment audit performance optimization system using the traditional algorithm. It can better reflect the authenticity of resource and environment audit performance data.

3.3. Analysis of the Performance Optimization Effect of Resource and Environment Audit under Different Algorithms.

The computer network technology algorithm is an important improvement based on conventional algorithms. We compare the performance optimization effects of different algorithms. According to the evaluation and analysis of the optimization results of the conventional algorithm and the computer network technology algorithm, the comparison data of the two algorithms are obtained, as shown in Table 3.

In Table 3, through the analysis and comparison of the performance optimization effect of resource and environment audit under different algorithms, it can be seen that the performance optimization effect of resource and environment audit under the application of computer network technology algorithm is better than that under the conventional algorithm, online monitoring, labor cost, resource optimization, environment optimization, and other related performance in resource and environment audit. The application of computer network technology algorithm has more advantages than the conventional algorithm.

According to the analysis of performance optimization effect of resource and environment audit under different algorithms in Table 3, data visualization is carried out, and Figure 4 is obtained.

Figure 4 shows the comparison of performance optimization in all aspects of resource and environment audit performance optimization under the application of conventional algorithm and computer network technology algorithm. In the optimization of resources and environment audit, the optimization effect of online monitoring of computer network technology algorithm is 94.60%, while that of the traditional algorithm is only 76.80%, the optimization effect of the computer network technology algorithm in labor cost is 96.70%, and that of the traditional algorithm is 75.40%. In terms of resource optimization, environment optimization, and other related performance optimization, from this, which can intuitively reflect that the application of computer network technology algorithm has a better effect on resource and environment audit performance optimization than the conventional algorithm and indirectly shows that this algorithm has more accurate online monitoring and less labor cost in China’s resource and environment audit. The optimization degree of resources and environment is higher, which greatly increases the work efficiency.

4. Discussion on the Performance Optimization of Computer Resources in the Network Environment

With the rapid development of the network, many resources in our life rely on network broadband to download and share. While enjoying the convenience of computer network for our life, we also rely more and more on computer network business. With the universality of computer networks and people’s dependence on networks, higher requirements for the quality of service of computer networks are put forward to meet people’s needs for computer networks. In the construction of ecological civilization in China, it is an engineering deployment involving politics, economy, sociology, and strategy. Integrating culture is also an important task of governing the country and accelerating the
construction of ecological civilization. The research of Shen Lihong et al. (2022) shows that environmental audit is not only an indispensable and necessary condition for the construction of ecological civilization system but also the basic guarantee for the effective operation of ecological civilization management system. On the basis of clarifying the mechanism of the government’s environmental audit promoting the construction of ecological civilization, this paper studies and explores the path of the government’s environmental audit promoting the construction of ecological civilization [11].

In the information society, computer network technology is more convenient to extract relevant data and carry out regression analysis through corresponding algorithms so as to simplify the repeated work, reduce the error of manual operation, and improve work efficiency. Among the environmental and ecological issues, the state and all sectors of society pay close attention to them. If we want to realize the mutual promotion and common survival between man and nature, we must be bound by the system of ecological civilization. The study of Shi Yajie et al. (2022) as the core guarantee for the implementation of the system, resource, and environment audit has played an important role in promoting the development of ecological civilization and optimizing existing problems and has put forward specific suggestions and measures [12]. In particular, the resource and environment audit involves different departments. A large number of documents and inspection records need to

Table 3: Analysis data of the performance optimization effect of resource and environment audit under different algorithms.

| Grouping                     | Online monitoring | Labor cost | Resource optimization | Environmental optimization |
|------------------------------|-------------------|------------|-----------------------|----------------------------|
| Conventional algorithm      | 76.80%            | 75.40%     | 77.30%                | 73.50%                     |
| Computer network technology algorithm | 94.60%            | 96.70%     | 95.80%                | 94.10%                     |
| T value                     | 5.63              | 5.32       | 5.45                  | 5.74                       |
| P value                     | 0.006             | 0.008      | 0.005                 | 0.007                      |

Figure 3: Visual diagram of coupling analysis of resource and environment audit performance optimization system under different algorithms.

Figure 4: Visual analysis of the performance optimization effect of resource and environment audit under different algorithms.
be verified. In the process of resource development and utilization and environmental management, the source, management, and use of relevant expenses need to be clearly recorded. In the process of using these funds, the support of relevant laws and systems is needed to ensure the correct flow of funds. At this time, the audit of the whereabouts of funds requires a lot of manpower to review. The computer network can reduce the work of manual transmission and input. Shayidan Ture (2021) mentioned in the research and discussion that with the increasingly serious environmental problems, the government also began to call on people and enterprises to jointly protect the environment and put forward corresponding countermeasures for the problems existing in China’s environmental audit [13]. Lian Shaoying et al. (2022) also used computer simulation research methods in the study Journalists’ Response to and Reporting on Public Emergencies in the Era of Artificial Intelligence and applied biomimics and biomechanics [14].

5. Summary

This study analyzes and studies the specificity, sensitivity, and coupling of the resource and environment audit performance optimization system under different algorithms through the feature extraction of resource and environment audit data of computer network technology and the resource and environment audit performance optimization algorithm. The purpose of resources and environment audit is to find out the possible major problems in resources and environment as soon as possible, which determines that the audit of fund use efficiency, system and policy implementation, or the economic and social benefits obtained by the project requires a lot of human and financial resources and high timeliness. The performance optimization of resource and environment audit under computer network technology is verified from the simulation, which alleviates the human and financial resources, improves the accuracy of data analysis and the optimization of resource and environment audit performance, and plays an important role in dealing with environmental problems in the future. Moreover, the protection of the environment is conducive to the construction of an energy-saving society, the realization of sustainable development, the enhancement of Chinese people’s awareness of saving resources and protecting the environment, the improvement of economic competitiveness, the realization of transformation and leap forward, and the great rejuvenation of the Chinese nation. The data selected in this study has limitations and the number of samples is insufficient. In the future, the number of samples will be expanded to make the research results more valuable.

Data Availability

The data underlying the results presented in the study are available within the manuscript.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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