Research on Computer Information Processing Technology under the Background of Big Data

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Abstract: In the development process of modern society, various kinds of data are constantly produced, and the capacity and structure of data have gone through tremendous changes. The data provides a new opportunity and a huge challenge for the development of computer information processing technology. This paper analyzes the computer information flow technology, information storage technology and information security technology under the background of big data, and explores the development trend of computer information processing technology under the background of large data to provide some references for the relevant researchers.

1. Introduction

Computer information processing technology plays an important role in data processing of enterprise management and government management [1]. This technology combines data transmission, acquisition, analysis, use, detection, processing and other technologies, and implements a unified management of information. Computer information processing technology combines computer technology, communication technology, network technology, sensor technology, micro-electronics technology and other advanced science and technology, has a wide range of applications in modern society. Computer information processing technology is generally applied to modern office. Professional and skilled personnel use high-tech office equipment to arrange their work reasonably, realizing the organic combination of hardware, software and people, and greatly improving the office efficiency. The emergence of computer information processing technology has changed the traditional office mode, the impact of office mode is enormous. Big data is another technological change in the IT industry after cloud computing and the Internet of Things. It has a tremendous impact on enterprise management, national governance and people's lifestyle. Big data blurs the boundaries between netizens and consumers and businesses, where data is the core asset and plays a major role in shaping the business model, organizational structure and culture. All enterprises will face many challenges in the era of big data, such as strategy, organization, culture, public relations and personnel training, but also great opportunities, because as a shared public network resources, its hierarchy and commercialization will not only bring new opportunities for their own development, but also good. Good service quality will make it full of originality and specificity. Therefore, knowledge hierarchy and commercialization are bound to open up a new era of knowledge creation. It can be seen that this is an era full of opportunities and challenges [2].

2. Opportunities and Challenges of Computer Information Processing Technology under the Background of Big Data

2.1 Opportunities.

The popularity of computer networks has led to the emergence of large data in all walks of life [3]. Although it is very difficult to deal with massive data, it can be processed and analyzed by new concepts and methods. The results are of great significance. The information processing of large data in enterprise management can improve the precision of enterprise management, improve the work

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efficiency of functional departments, thus reducing the expenses of enterprises and making enterprises more competitive. Many enterprises in data mining, if encounter massive data, there is no better data processing technology, will lead to the overall data processing appear more serious problems. In the field of education, the application of large data information processing to statistics of the interests of students, strengths and weaknesses, you can teach students in accordance with the different circumstances of each student, develop their strengths; in business competition, the application of large data information processing technology to analyze consumer preferences, needs and selling points of popular goods. In this way, the sales volume and profit margin can be increased. At present, the United States has taken the lead in developing the technology of big data information processing to the national strategy. For the databases we use today, they generally have simple functions of input, query and statistics, but these functions cannot quickly get meaningful data from large data. Through such management and data processing, it will lead to its own goals and laws beyond expectations. If the target data can be quickly and accurately obtained from computer data processing, more information behind the data can be obtained, and more useful data can be obtained.

2.2 Challenges.

In the era of big data, information security is the most important. People's daily information and their own important information are through the Internet of Things and many convenient services for the use of funds, so personal information security, on their own economic security has a very important role and significance. For large enterprises, information security is the key to ensure the good development of enterprises. Therefore, in the current era of big data development, the demand for information security is higher than the original one. Controlling the security of information and the overall management and control of information can have a corresponding impact on the whole world. Therefore, both individuals and enterprises themselves need to pay attention to the safety of information, to ensure the safety of information management and use, to prevent unnecessary losses. For the data itself, its own significance and role is not obvious, the key lies in the value of data analysis and research. Decision-makers can get correct management methods and concepts through the value analysis of data. Data redundancy has become the most important issue for massive data in the era of large data. By using computer information processing method, data analysis and management in the era of large data is the fundamental to improve the level of data value analysis. Big data is a very long process. The most outstanding expression is the need for long-term accumulation. Therefore, when the basic data is managed and processed, it is necessary to analyze the data value itself to obtain the most advantageous and valuable data value. In the era of big data, the content of data is increasing constantly. There are both authentic and false information in these data. If screening is done one by one, it will cost a lot of manpower, material and financial resources. Therefore, we should focus on the analysis of valuable data to increase the economic efficiency of enterprises [4].

3. Computer Information Processing Technology under the Background of Big Data

3.1 Information Flow Technology.

Information flow technology mainly includes the technology of information collection, processing and transmission. Using reasonable means to collect relevant data information, computer staff can set up real-time monitoring mechanism to store the specific needs of information, timely remove garbage information, and then ensure that the data processed by the software is effective, and this is also an important step to improve the efficiency of software processing. In the process of processing information, it is necessary to process the data information according to the basic needs of users, and use the nature classification method, function classification method and subject classification method to facilitate users to query. Information transmission is an important advantage of network technology applications, mainly refers to the processing of information and according to actual needs, information will be delivered to the customer's information platform, and then the implementation of

data information transmission. In order to process the information in the network, we need to collect the data in the network at first. Only after filtering and collecting the massive data in the network, can we further analyze and store the needed data. Real-time monitoring of the required data targets will be required to collect the relevant data and store it in the database to provide basic data for the relevant information processing system. We process and analyze the collected data through the relevant data analysis and processing software, and finally transmit the information after analysis and processing, and transfer the useful data to the place where it is needed, and then play a role. For computer information technology, the key is information collection and processing. They are also the foundation for the development of information processing technology. Information collection and processing is to supervise and control the established information, and store the valuable information in the computer database for future use.

3.2 Information Storage Technology.

Computer storage technology is to store the possible useful data collected from the network, establish a large enough database, temporarily store the relevant data here, at any time to provide the needed software for invocation. The greatest feature of the big data era is the huge amount of data, various types of data, data repeatability. How to use computer storage technology to store the needed data efficiently, quickly and conveniently is of great significance to the development of the entire network technology. In the era of large data, the number of data information storage increases rapidly, and the real-time update speed of information is accelerating unprecedentedly. Improving information storage is conducive to controlling the security of large data and increasing the efficiency of network information processing. Information storage is mainly achieved by acquiring relevant technical means, and then classified according to certain classification principles. We store the data in a certain structure in the database, and when the user needs to obtain the relevant information, the information can be retrieved by means of retrieval. Reasonable information processing technology can ensure the use of information efficiency, especially in the era of information explosion, mass data storage will make the integrity and security of information higher, therefore, it is necessary for the vast number of workers to increase the study of information storage technology. Under the effect of effective data information, traditional information storage only relies on computer to complete information processing. It has poor processing ability and slow speed. But after the advent of cloud technology, these problems can be solved. Cloud computing can not only provide data processing results to users, but also improve the overall capacity of information services. Cloud technology has become a popular technology at this stage.

3.3 Information Security Technology.

In the context of big data, the entire data system is interconnected through the network. Data is no longer stored in their own computer data, their computer data will also be shared through the Internet to this computer network platform, then this will inevitably involve data security issues. The development of computer network security technology has put forward very high requirements, large data has brought opportunities, but also brought huge security risks. Computer information security technology cannot be ignored. To strengthen computer security technology, we need to start with the whole computer security system to strengthen the development of computer security technology. We also need to pay attention to the training of relevant technical personnel, from the aspect of personnel to build a security technology system. We should pay attention to the research of computer security technology. Under the background of large data, the traditional technology cannot meet the current technical requirements, so we need to use new thinking and innovative ideas to develop new security technology to face the technical security problems under the background of large data. Finally, real-time monitoring of more important information is enhanced. Because of the huge amount of data in the context of large data, it is easy to lead to information leakage, so it is necessary to carry out some real-time online monitoring of some particularly important information to ensure the security of information. Speed up the development of big data security technology products. Because the traditional information security software products cannot meet the development characteristics of the

big data era, it is necessary to accelerate the research of reliable data security technology products. Construct a perfect computer information security system, invest a lot of manpower and financial resources in the construction of computer information security, and let more outstanding technical personnel participate in it. We should increase computer safety personnel and provide talents for the development of computer security technology.

4. Development Tendencies of Computer Information Processing Technology under the Background of Big Data

Cloud computing has also become the most critical technology in modern times, which can be linked with the development of computer networks to optimize and enhance the ability of computer information processing. The development of computer network needs constantly updated hardware as support. Under the influence of the big data era, the former computer hardware is not competent for data processing, and there are many problems. In view of this situation, enterprises and institutions should contact the actual needs of society, while building a network center, enhance the efficiency of computer network transmission, so that it is more in line with the mode of large data network. Cloud computing-based network software, programmability and responsiveness are increasing, thus constituting a cloud computing network. Cloud computing network storage capacity is much stronger than traditional storage methods, computer information processing capabilities can also be significantly improved, and can eliminate the original computer information processing speed, inefficient problems, once a problem occurs, it can be quickly feedback to the system. Driven by cloud computing networks, computer information processing capabilities will also be faster and more widely used. Computer security information technology has also become the direction and focus of computer information processing technology development in the era of large data. Traditional computer information processing security software cannot meet the needs of security management in the era of large data. It is particularly important to develop new security technology software and build a new computer security system. In the era of big data, the entire data system is interconnected through the network. Personal computer data storage will be shared through the Internet to the computer network platform. The network itself is an open platform, from which anyone can get the information they want anytime, anywhere. In the era of big data, criminals can easily obtain trade secrets or personal information by analyzing huge amounts of data. This is bound to involve data security. Therefore, security will also be one of the most important directions in the development of computer processing information technology in the era of large data. In order to improve security technology, we need to build a sound system management to enhance data security. Previous computer information processing software is incompatible with the requirements of security management in the era of large data, and its application to large data security management cannot play its due role. This needs to attach importance to the development of security software and form a new safety management system. Only in this way can we promote the development of computer security information technology.

5. Conclusion

The big data era is an opportunity and a challenge for computer information processing technology. It requires us to constantly improve the current deficiencies. According to the needs of mass data processing, we establish a network system and security system in the big data era to broaden a wider range of applications of computer information processing technology.

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