Analysis of Computer Information Processing Technology Based on Big Data Technology

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Abstract: With the advent of the Internet era, people can interact with others and transmit data without leaving home. These data put forward new requirements for computer information processing technology. In order to meet the basic needs of modern human life, more and more network companies begin to devote themselves to large data processing technology. Starting from the concepts of "big data" and computer information processing technology, this paper expounds the role of "big data". On this basis, the computer information processing technology under the background of "big data" era is systematically analyzed, and its future development trend is discussed. Through the development of cloud computing technology, a cloud computer network is formed. At this stage, we should combine the characteristics of big data to develop new computer information storage technology to ensure that computer information storage can be completed quickly and efficiently. The importance of “big data” should be fully recognized. Constantly strengthen the research of this technology and improve its application efficiency. Thereby bringing greater convenience and benefits to the production and life of society.

1. Introduction

Under the impetus of industrialization, the distance between people gradually narrows. Especially with the advent of the Internet era, people can interact with others and transmit data without leaving home. The capacity and structure of data have undergone tremendous changes, which put forward new requirements for computer information processing technology. These requirements make the existing computer information processing technology face enormous challenges, but also ushered in new opportunities for development. It not only changes people's traditional way of life and work, but also makes work and life simple and efficient. At the same time, the application of computer information processing technology has also provided favorable conditions for technological innovation in many fields and the development of people's creative thinking. In this context, the requirements for modern computer information processing technology are increasing. Therefore, it is of great practical significance to strengthen the research on computer information processing technology in the context of "big data" era. With the rapid increase in the number of Internet users, Internet data information has also shown a big explosion. Therefore, it is of positive significance to increase the research on computer information processing technology under the background of big data.

More and more network companies have not only limited their business to traditional information processing. Most companies have turned their attention to the development of big data. While improving people's convenience of life, it also greatly enhances people's work efficiency and plays a key role in improving people's quality of life and progress in social development. In order to meet the basic needs of modern human life, more and more network companies have begun to work on big data processing technology, thus opening the curtain of the cloud era. How to better innovate computer information technology and promote it to meet the growing material and cultural needs of mankind is a major issue facing modern computer technology. With the progress of electronic information technology and the demand of social development, the era of big data has come, which also puts forward higher requirements for computer information processing technology. Big data is actually an information phenomenon that is highlighted by the development of computer application technology at a certain stage. More and more data is stored through computer processing. This

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article starts from the concept of "big data" and computer information processing technology, and expounds the role of "big data". On this basis, the computer information processing technology under the background of "big data" era is systematically analyzed, and its future development trend is discussed.

2. Materials and Methods

From a theoretical perspective, big data is the meaning of a large amount of data storage. Traditional unidirectional processors are difficult to store and analyze large amounts of data in a short period of time. Nowadays, home doctors and storage devices cannot integrate large amounts of data in a short period of time. When the data collection work is completed, the data can be classified, analyzed, and organized. The collated data is then propagated to the network to realize the value of the data over the network. "Big data" is different from the data forms and concepts we have known in the past, and has its own unique characteristics. In the era of big data, the amount of computer information data to be processed is huge. And with the development of all sectors of society, as well as the huge demand of national macro-control for data, the amount of data that need to be integrated, analyzed and processed is also increasing rapidly. In addition to carefully studying its architecture, big data should also make breakthroughs in virtualization technology, high-performance cloud storage technology, high-speed cloud processing technology and related data security technology.

With the increase of modern data storage and computational requirements, data processing technology is also improving accordingly. From the point of view of handset processing mode, computer information processing technology is the technology of concretizing abstract data content. In the ordinary data storage process, because the amount of data involved is generally small, the performance requirements of computers and networks are not high. Common computers and networks can meet the storage requirements of these data. Through the integration of a large number of advanced electronic information technology, it can meet the requirements of "big data" massive data information processing. It also forms the characteristics of high-speed data processing that is unique to "big data." The big data information processing technology built by virtualization technology can collect and integrate various favorable resources and store necessary information resources. Different processing techniques are also adopted for different information categories and different processing requirements. This also makes the computer information processing technology for big data appear to be complicated and developing.

If ordinary data storage technology is applied to the storage of big data, it will cause a lot of resource consumption. Therefore, it is necessary to combine the characteristics of big data and adopt a new method for big data storage. Ensure fast and stable storage of big data information. Figure 1 shows the structure of the Internet financial supervision method for big data.

Fig.1. Big data reshapes the structure of Internet financial supervision

3. Result Analysis and Discussion

The era of big data based on data information is built on the basis of cloud computing and Internet of Things technology. Driven by information technology, the boundaries between

consumers and data providers are becoming increasingly blurred. The era background of big data is to open the boundaries of data input and output. The recipient of information can also be the exporter of information. Due to the limitation of hardware performance, the current computer information processing technology can not fully meet the performance requirements of large data security management. But it also creates conditions for the development of computer networks. With the change of data structure and total capacity in the era of large data, it is difficult for current information security technology to monitor large data comprehensively. The development of new information security technologies should be comprehensively strengthened, and comprehensive monitoring of big data information should be realized through technology update to ensure data security in all aspects. The massive data information of “Big Data” has great difficulties in transmission, analysis, storage and processing. Various processing technologies based on the "big data" information processing requirements are also constantly being researched and developed. The complexity and diversification of computer information processing technology has become a major feature of the "big data" era.

When developing a big data information system, it must be based on the actual needs. Extensive exploration of cost-effective data center network architecture. Moving your data center to the cloud has made cloud computing data centers larger and larger. The system delay data for different network parameters is shown in Table 1.

Table 1 System delay data for different network parameters

Network parameters	Minimum value	Maximum value	Median	Average value
0.6	5.94	6.89	6.42	6.59
0.8	3.38	7.26	5.51	4.82
0.1	1.87	6.82	4.76	5.18

Because big data systems need to meet the needs of a large number of users at the same time, and to provide efficient services for the processing and analysis of large data sets. In this way, cloud storage technology must have high throughput and high transmission rate, and data management technology must also be able to efficiently manage large data sets. The network information search hotspot generally adopts a sorting learning algorithm, and the method is mainly based on the current social media information volume. The media pays attention to the characteristics of the data as a short text feature, and this algorithm is based on this feature. There is a need to coordinate the balance between data tracing and privacy protection. This is mainly due to the fact that data traceability is in the process of security protection of big data, and it is necessary to obtain the source information of the data on the basis of analysis. More and more consumers will register their private accounts through the website. These accounts involve not only personal privacy, but also personal property. The existence of computer viruses is likely to pose a threat to consumers' privacy and property. When facing huge user data, any enterprise needs to find data suitable for its own development characteristics. Only by getting real feedback from users can enterprises obtain good economic benefits.

In order to improve the compactness of the topology, the number of communication nodes must be as few as possible for each service circuit set. Figure 2 shows the original data and the forecast data.

The opening of the era of big data indicates the popularity of computer network systems. However, due to the limitations of human production methods and lifestyles, it is still difficult to carry out intensive processing of large amounts of data in a short period of time. The lack of professionals in computer information processing technology is tantamount to the lack of core technologies for computer information processing. A company that lacks core technology can't stand out in the fierce market competition. It is necessary to strengthen the construction of the current information security system. While strengthening the construction of the security system, it is also necessary to train new technical personnel for technical management personnel. In the enterprise management, the use of large data information processing can centralize the functional

departments of the enterprise and improve the coordination between different departments within the enterprise. While strengthening the research and development of technology, we should gradually get rid of the restrictions of computer hardware equipment on information processing technology. Make network data information separate from computer hardware. Through the development of cloud computing technology, cloud computing network is formed. Make the information processing of big data independent of hardware devices. At this stage, we should combine the characteristics of big data and develop new computer information storage technology to ensure that computer information storage can be completed quickly and efficiently.

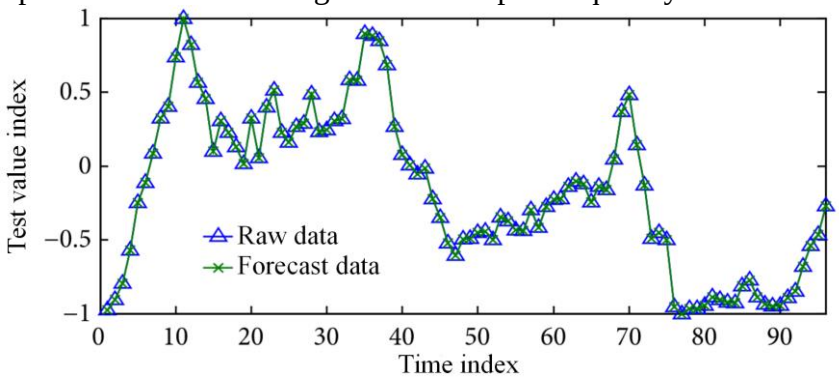

Fig.2. Raw data and forecast data

4. Conclusion

Big data brings benefits to our cloud users, businesses, and network service providers. And it has also become an emerging industry model. However, as far as the current development of big data is concerned, China's big data is still in its infancy. Due to the limitation of computer hardware, computer networks have many limitations, and it is necessary to convert the current computer network into a cloud computer network. This is the development trend of computer information processing technology in the era of "big data". In order to meet this requirement, people will continue to research and update computer information processing technology and hardware technology to promote the rapid development of computer information processing technology. With the continuous vertical development of various technologies. While human society is facing a high degree of informationization, some drawbacks caused by the corresponding big data will also be highlighted. Only through continuous improvement and improvement in practice can big data really show its advantages. The importance of "big data" should be fully recognized in the future. More importantly, we should see the strategic role of computer information processing technology in this context. Continuously strengthen the research of this technology to improve its application efficiency. It will bring greater convenience and benefits to the production and life of the society.

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