Application Analysis of Computer Software Technology under the Age of Big Data

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ABSTRACT. With the rapid development of computer technology, the level of various types of computer software has also risen linearly, and is widely used in all aspects of society, directly affecting people's lives and work. Especially in the era of big data with rapid growth of information, it has effectively expanded the development space of computer technology applications and promoted the development of computer software technology. Based on the development of computer software in the era of big data, this paper analyzes the specific application of computer software technology in big data, and explores and analyzes it.

Keywords: Big data era; computer; software technology; application analysis

1. Introduction

With the continuous improvement and development of computer technology and the popularization and application of computer software technology, computers have changed the way people live and work to a certain extent, affecting the development of various industries. Especially in the context of today's big data era, computer software technology and traditional lines are integrated to change the production technology and management mode of traditional industry fields, so as to occupy an advantage in the fierce market competition, which requires the application of computer software technology. Research, to make it integrate with traditional industry sectors, promote rapid development of enterprises, and improve the overall production efficiency of society.

2. Overview of computer software technology in the era of big data

Big data is a large amount of data that has a useful value after being processed. Under normal circumstances, the computer cannot manage, analyze, and organize the data on its own basis with ordinary software, especially as the amount of data increases, computer software As data processing work also needs continuous development and progress. At present, the overall economic structure of the society is constantly changing. For the traditional production mode, computer software technology can improve production efficiency and create more economic benefits. Therefore, in the commercial field and production field, the computer software

technology can be rationally and scientifically applied to the daily production and operation environment, which can improve the core competitiveness of the enterprise and occupy a place in the increasingly fierce market competition. Especially in the era of big data, computer software technology is widely used in various fields of society, and its importance is also increasing. According to the survey and research, the total data stored in the global database contains great business mechanism, which can provide accurate development direction for the development of the industry. This requires the use of computer software technology to analyze and refine it to assist the development of various industries. To improve social productivity.

3. The development status of computer software technology in China under the era of big data

With the popularization and application of computer software technology, all fields of society are aware of the important value of computer software technology, and the status of computer software technology in social production is also increasing. Therefore, in order to achieve better development, many government research institutions and enterprises have strengthened research related to storage and databases, and have established databases to increase the support and importance of data preservation, analysis, and reserve research. In this way, it has provided many conveniences to the public and improved the efficiency of the use of public resources. With the advent of the era of big data, the main working direction of computer technology is to analyze and refine the massive data in the database in the database, and to filter out the data containing huge commercial value, and analyze and summarize it to provide users with massive amounts. The data resources provide direction for the development of the social economy and improve production efficiency. The data analysis, sorting and refining of computer software technology has become the main research direction of current computer technology. By relying on big data to integrate and utilize network data, it can supplement the Internet database, optimize the process, and provide users with better service. Therefore, the arrival of the era of big data has provided a huge space for the development of computer software technology, promoted the surge of overall social productivity, and promoted the overall development of society. At the same time, big data as a major technological reform after the Internet of Things has brought new challenges to various fields such as government relations, enterprise management, and personnel training.

4. Analysis of related applications of computer software technology in the era of big data

The main purpose of computer software in the era of big data is to find out the corresponding laws in a large amount of data, and analyze customer needs, and carry out product design, production and service in a targeted manner. Generally speaking, there are three main computer software technologies in the era of big data, namely

virtualization technology, cloud storage technology, and information security technology. The following is a detailed analysis.

Virtualization technology is a new management technology of modern social resources, mainly for the management of virtual resources. In recent years, virtualization technology has been highly praised at home and abroad, especially enterprises and research institutions, which have used it as a hot technology and invested a lot of manpower, material resources and financial resources to conduct research. Virtualization technology is currently considered to be the core technology of computer software technology, and has advantages that other computer technologies cannot match. Because virtualization technology mainly manages virtual resources and optimizes internal resources, it can ABSTRACTly transform and display various resources stored in computers, break down structural barriers, improve resource utilization efficiency, and reduce Information processing costs increase the flexibility of user operations. China's research and development of virtualization technology is later than that of Western countries. However, with the continuous development of computer technology, virtualization technology has gradually integrated into big data, which has improved the research level of virtual technology and achieved good results. For example, Beijing University of Aeronautics and Astronautics, through the research and development of the technology, established a distributed virtual environment, the implementation of dynamic databases. Therefore, in the context of big data, virtual software is perfected by big data, and scientific research can be flexibly applied to various scenarios, increasing its security, usability and scalability, saving manpower and material resources, and bringing huge economic benefits to the society. Improve the technological content of virtual technologies and promote the innovation and development of virtual technologies.

The concept of cloud storage is widely used in various fields of society, directly affecting people's learning work. People's demand for the Internet continues to develop with the innovation of technology, breaking the time and space constraints, abandoning the drawbacks of the traditional storage model, and facilitating users' access to information. As long as the user's terminal device is connected to the Internet, the content information in the cloud storage can be viewed and downloaded by means of the network APP. The storage of such information requires more storage space, and the traditional storage method cannot meet the storage needs of the current society, and "cloud storage" is born. Cloud storage is composed of multiple storage units, and combines multiple functions to work together to achieve a qualitative leap in traditional storage capacity. Cloud storage has hundreds or even thousands of GB of storage space, and achieves the perfect combination of automation and intelligence, scientific integration and classification of massive information, providing users with more convenient information services, improving storage efficiency and avoiding Waste of resources.

The data in the era of big data is related, especially the use of computer software technology to mine the relationship between data, this subtle connection may have a negative impact on information data. The individuality of these data is getting weaker and weaker, and the relationship between the data will also affect each other.

Because some of the data is threatened, other data will also be affected, which will result in leakage of user information, affecting the integrity of the information, leaving a huge security risk. This requires improving the level of information security technology, improving the security level of data clusters, scientifically adjusting the network of database management systems, and improving the authenticity of data.

5. Application of computer software application technology in the era of big

Computer software applications are also very common in the field of education, such as multimedia teaching, micro-teaching, etc., providing teachers and students with corresponding convenience. Students can be free from time and space, and they can learn anytime, anywhere, as long as they have a network. Therefore, the rational use of computer technology in teaching can improve students' enthusiasm for learning and interest in learning. With the help of multimedia and other related technologies, ABSTRACT knowledge images can be presented to students to deepen students' understanding and application. In addition, teachers can also use the online answering software to summarize the students' answers, which can enable teachers to grasp the students' learning situation in time, facilitate the targeting of later education, improve students' learning efficiency, and promote the development of education.

Computer software technology is used in the field of commercial communication. With IBM SPSS for forecasting and analysis, the accuracy of business information can be fully improved, and unnecessary information loss can be reduced. Through XO and other technologies, customer behavior can be accurately predicted, and development problems can be discovered in time. Give feedback. Clearly understand the customer's hobbies and abilities, and accurately classify them to maximize economic benefits. In addition, computer software technology has also been popularized and applied in commercial operations, effectively improving the enthusiasm and efficiency of the company's personnel, and promoting the operation and development of the company. For example, computer software technology is used to analyze and summarize the customer's browsing information and purchase records, analyze the customer's consumption demand, and provide customers with satisfactory services.

6. Conclusion

With the continuous development of social science and technology, the advent of the era of big data, computer software technology has made great progress in the collection, processing, analysis and storage of data. The use of computer software technology in the era of big data can effectively improve the overall efficiency of enterprises, improve the quality of teaching, and promote the development of society and the progress of the times.

6. Acknowledgement

Shaanxi military and Civil Integration Project No: 18JMR42; Weinan normal University Research Project:: 18YKS17

References

- [1] Xiang Yu(2016). Application of computer software technology in the era of big data. Electronic Technology and Software Engineering, no.22, pp.78-86.
- [2] Zhang Chunrong(2017). Exploring the application of computer software technology in the era of big data. Digital Communication World, no.05, pp.194-195.
- [3] Zhang Hua(2018). Talking about the application of computer software technology in the era of big data. China Management Information Technology, vol.21, no.02, pp. 123-124.