Application on Computer Software Technology under the Background of Big Data

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Abstract: With the rapid development of science and technology in the 21st century, computer technology has been applied to all aspects of national life. And it is closely related to people's life. In the era of big data, an important part of society has already included the development and application of computer software technology. This paper analysis the importance and development status of computer software technology. And then, we study the application of computer software technology in the era of big data. We expect that this study can promote the continuous improvement of the whole social economic and comprehensive benefits.

1. Introduction
The overall economic structure is facing a transformation. Compared with the traditional production mode, the production efficiency and economic benefits is higher under the computer software technology combining with the production mode. So, the computer software technology is one of the important factors for promoting the social and economic development. However, in the actual production and operation process of business and production field, how to effectively apply and combine computer software technology has become an important research topic. With the advent of the big data era, the importance of computer software technology in various fields is gradually increasing. According to the research shows that the total amount of data stored in the global database is 1.8 ZB, and the average data saved by each person is 200 GB. Computer software technology can analysis and refine these data, and then calculate important data with significant commercial value. This provides a clear and accurate development direction for the various industries development. Computer software technology has greatly promoted the rapid development of various fields, and there is a new wave of surging social productivity.

2. The development status on computer software technology under the background of big data
Along with the popularization and popularization of computer software technology, various industries have gradually realized the important value. Computer software technology plays a significant role in practical work. At the same time, the importance in various industries is increasing. There are many organizations that have built their own databases, such as many government research institutes, enterprises and other organizations. They also increased data preservation, analysis and reserve research support and attention. This improves the convenience of people's lives. With the advent of the big data era, data analysis and refining have become the main work content and the general research direction of computer technology. Under the background of big data era, the main direction and content of computer technology is to analysis and refine massive data in the database, and then choose the data with great commercial value and hidden value. Only in this way can we clarify the specific direction and improve the production efficiency. For example, a supermarket can use computer technology to analysis customers' consumption records, commodity purchase records, consumption ability and potential...
purchase intention, and then calculate the sales ability of goods. Supermarkets can increase sales efficiency by increasing the efforts to promote such products. With the arrival of the big data era, computer software technology improves the total productivity and advances the overall development of the society. At the same time, the big data era also brings new challenges to enterprises, government departments and various industries.

3. Application on computer software technology under the background of big data

3.1 Cloud storage technology

Cloud storage technology is a new concept derived from Cloud computing technology in recent years. Under the background of big data era, cloud storage technology has a wide range of applications and broad prospects. Compared with traditional storage technology, cloud storage technology greatly improves the convenience of users. When users use cloud storage technology to save data and files, they only need to log in and submit the required stored data. Then they can devices, view and download the saved data and files in different smart. However, traditional computer storage technology relies on hardware devices to store data, such as solid-state drives, memory CARDS, and so on. Which is far less convenient and less protected than cloud storage technology. With the continuous development of data information, the concept of "cloud" is more and more widely used, which improves the efficiency of people's life and learning. Traditional computer storage technology is no longer able to meet the actual needs of people, we need to increase the storage space. Cloud storage technology optimizes the disadvantages of traditional storage mode. It effectively solves the time and space problems existing in the traditional storage mode. Cloud storage technology can not only effectively improve the storage capacity, but also improve the storage performance. So, we need to continuously improve the operation speed of various storage systems and enhance the response ability to various operating orders. The storage management system can carry on the statistics conformity to the class information resources, and it can provide the more humanity service for the user. The basic architecture of cloud storage is shown in figure 1.

3.2 Virtualization technology

Virtualized computer software technology is a management technology, which is often used to manage various resources. It mainly manages and sorts out virtual resources, data and information. There are
various physical data resources in the computer, including internal training, server, network and storage. All kinds of physical resources mentioned above can be presented to the public in the form of transformation and abstraction.

![Figure 2: Application of virtual technology in BIM](image)

Virtual computer software technology has been paid more and more attention in the international development. It is a common technology in the development of enterprises. More and more enterprises have invested a lot of time, capital and energy in the research and development of virtual technology. At present, the growth and development of virtualization technology is the key to improve the overall efficiency. Compared with other software technologies, virtual computer software technology has flexibility, security, high scalability and availability. Virtual technology can enhance the actual utilization value and reduce the cost of production. It can provide strong technical support for enterprise innovation and development. The research and development of virtual technology in China started from BUAA. In the era of big data, the application of virtual computer software technology improves the data processing ability. Virtual technology is applied to all walks of life. Such as, the application of virtual technology in BIM is shown in figure 2, the application of virtual technology in medicine is shown in figure 3.

### 3.3 Information Protection Technology

Under the background of big data era, the communication frequency between various data gradually increases, and there is a certain influence and correlation between them. However, the interaction and influence of various data have a negative effect on the security of information data. In view of the above problems, we should pay attention to the protection of computer network database, improve the overall safety performance. The computer network system has the characteristics of openness and interconnectedness, and it is very easy to be invaded by all kinds of viruses. So, the information data security protection work is extremely important, it is the integral computer technology development premise and the effective safeguard. In the era of big data, the popularization and popularization of computer technology promote the overall society development. At the same time, information protection technology also ushered in a new era of challenges. So, we should pay attention to the in-depth research and development of information protection technology. We will continue to improve loopholes in technology and ensure the security of the country and the people.

### 4. Conclusion

Under the background of big data era, the development prospect of computer software technology is very broad, and the application scope is gradually expanding. Today's top priority is to study computer software technology in depth. We should combine computer software technology with science in all
fields. Only in this way can operating costs be reduced and overall social productivity improved. In the era of big data, computer software technology needs to pay attention on enterprise management software.

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