Research on Improvement of Computer Software Technology Based on Internet Technology

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Abstract. The rapid development of computer technology is an important symbol of human development and progress. With the continuous improvement of informatization, modern society has entered the era of big data. People's daily life, work and study are inseparable from the assistance of computer software technology, and the social progress, the development of science and technology, and the trade of enterprises are also inseparable from the support of computer software technology. Based on the background of Internet era, this paper focuses on the analysis of the concept, classification and application of computer software technology in the current environment, and explores the development direction and positive influence of computer software technology. The application process of computer software development technology needs to find out the important factors that restrict the development of computer software development technology according to the actual situation, and constantly improve and innovate, so that computer software development technology can meet the needs of the development of the information age, and better provide safe and reliable technical support for China's economic development and social progress.

Keywords: Computer software; Internet; information age; big data

1. Introduction
Since the advent of the first electronic tube computer at the beginning of the 20th century, the computer has gradually penetrated into various fields of the national economy and gradually played a leading role [1]. It can be said that in today's society, human life is almost inseparable from the use of computers, and even more inseparable from the support of computer technology. In the internet economy environment, the software development process pays attention to high efficiency and high recovery rate, which puts forward higher requirements for development technology and use functions [2]. Computer software mainly includes application software and system software, which is an indispensable part in the process of computer operation [3]. With the continuous expansion of application scope, people put forward higher requirements for the structure and function of computer software technology, and the development of technology is changing with each passing day. In the practical application process, computer software technology can not only improve the application efficiency, but also ensure the application quality [4]. Under the premise of rapid development of science and technology, the daily application of software technology needs to be more innovative and...
scientific, in order to meet people's growing needs [5]. Under the background of the current big data era, the computer software technology has developed rapidly in the process of putting forward and concrete application. With the continuous upgrading of the network, the number of talents in computer specialty is increasing [6]. The software design and development based on Internet economy system should not only strengthen its functions, but also develop innovative ideas to provide favorable conditions for network system design.

Computer is composed of hardware and software, among which software system is the core of computer. With the development of society, the position of computer becomes increasingly prominent. The whole research process of computer is accelerating and its scope is expanding. However, in order to keep up with the pace of big data era and ensure the application effect of computer software technology, it is necessary to take targeted measures in practice to promote the further development of computer software technology itself [7]. The rapid development of Internet technology in modern society has greatly promoted the progress in various fields of society, and also promoted the overall development of information technology, making computer software technology widely used in various fields of society [8]. Software technology is the core part of computer technology. With the increasing application of computers, the software industry has gradually developed into a pillar industry of China's national economic development, accelerating the process of China's informatization construction [9]. Big data can effectively predict the consumer's consumption purpose and behavior, and then predict the sales volume of products, which has a positive role in promoting enterprises to determine accurate marketing scope and inventory replenishment [10]. Based on the background of Internet era, this paper focuses on the analysis of the concept, classification and application of computer software technology in the current environment, and explores the development direction and positive influence of computer software technology.

2. The importance of Internet and big data application

At present, China has entered an all-round information age, and the traditional computer software development technology can no longer meet the rapidly developing market demand. It is inevitable and feasible to standardize the computer application software development technology by combining the previous work experience and work standards. In the current highly information-based social environment, the interaction and dissemination of information is too convenient, which leads to the objective connection between various data, which leads to negative problems in the process of information transmission. The development of computer software is not a once-and-for-all thing. After the software development, relevant technicians should analyze the specific usage and existing problems, and maintain the software scientifically to ensure that it can meet the long-term use needs. For every specific industry, every industry is an update of God and needs the support and support of this technology. With the support of this era and technology, we can innovate and seek a new round of development opportunities, and also have a brand-new grasp of the existing Internet technology.

In the era of national network, the role of computer application software is very critical. Although the use effect is remarkable, it does not start from the long-term development needs in terms of maintenance, which is not conducive to the benefit of software functions in the future. Conceptually, cloud storage is a mode of online information storage, which usually stores personal or enterprise information in a virtual server hosted by a third party. When there is demand, it can be downloaded and acquired instantly through the network at any time and space, which makes the access of information break through the limitation of time and space and achieve a higher and more convenient interactive mode. The development of computer application software is mainly done according to users' needs. Due to various influences, many softwares have not been applied after development. The main reason is that the software itself is unstable and its internal functions are too complex, which brings some difficulties to users. In the era of big data, cloud storage provides users with more convenient user experience and information help, and also promotes the development of information processing and analysis, thus giving birth to the concept of cloud computing. Computer virtualization technology is a great leap in the development of computer software technology, which reduces the
management cost, improves the flexibility, security and usability of use, and also achieves higher scalability and operability, which promotes the leap-forward development of computer software technology.

3. Problems in the development of computer software technology

3.1. Lack of core technology in software industry

Of course, the application of "internet plus" technology is not perfect, because everything must have two sides with its development. When we see its great benefits to our lives, we should also pay attention to its own limitations and the influence of breaking through borders. For Internet technology, the most primitive function is actually only the operation and processing of some data. The emergence of software technology is to solve the calculation of these data, and complete the inherent formula calculation through the set integrity program to obtain accurate academic data. Some teachers use old-fashioned teaching methods in the teaching process, and the actual teaching has not kept pace with the development of the times, which hinders the development of computer application technology. The development of computer courses has not kept up with the development of the times, and the computer courses in many schools are still in a backward state. The reason is that schools are limited to the traditional education mode in curriculum reform, paying too much attention to students' academic achievements and neglecting the cultivation of students' practical ability. Although some schools are aware of the importance of computer application technology, the role of Internet has not been applied to computer courses in practice, which leads to the failure to improve the teaching efficiency of computer application technology courses.

3.2. The development environment of software industry needs to be optimized

Software technology can be seen everywhere and exists in all walks of life, such as banking system, automatic deposit and withdrawal machine, reading and recording bank data, etc. The entry of patients' medical records and the real-time records of treatment process in hospitals can be processed by software technology. At present, the overall development level and ability of China's software technology are at a low level, especially the independent innovation ability is not very high, which makes China's software industry in the middle and lower reaches of the global software industry chain, and the level and quality of products produced are at the lowest end of the market. At present, most of the staff in China's software industry are basic technical personnel engaged in basic program development and software technical support, but the high-level scientific research personnel who play a leading role in the process of software technology research and development are extremely scarce, which will certainly become an obstacle to the development of China's software industry to a deeper and wider high level. Since the beginning of the development of China's software industry, although great progress has been made, the development structure of the software industry is unreasonable, especially the lack of leading troops, and the influence of international brands and industry giants in the software industry is obviously insufficient.

4. Improvement of computer application in Internet plus Era

It is a big trend for software technology to develop towards innovation and intelligence. Excel, our most common software, can be used by people to select, compare, analyze the histogram and the development trend of data under the condition of inputting data, so as to allocate the corresponding resources reasonably, and the data correlation can be seen at a glance. In the software development stage, the whole life cycle computer method is applied to count the hidden troubles in the software calculation process, and discuss and study together from the perspective of resource sharing, so as to establish a stable life cycle environment for the future use of the software, thus achieving the best control and management effect. Under the background of internet plus era, the teaching of computer application technology should start from the actual situation of students, take the things that students are interested in as the breakthrough point, and combine classroom knowledge with our actual life to
arouse students' curiosity and stimulate students' interest in learning [12]. Computer software may be attacked by viruses when running under the network environment. In the whole life cycle algorithm, attention is paid to software risk hidden danger control. Through mutual control and adjustment among various systems, the software virus defense ability can be improved, and it can be run and used more efficiently under the network environment. With the improvement and innovation of computer technology, under the current development of science and technology, the difficulty of developing software is obviously reduced. The key problem to gain the user's approval is how to develop a software with customer demand and high market penetration rate.

Cloud storage technology can realize the fast storage and reading service of a large amount of information by big data, thereby helping users to establish their own network database and providing users with more convenient and fast information services. Combining big data with cloud storage technology is an innovation of data processing and integration technology in the Internet era, and it is also the development direction and inevitable requirement of computer software. The system structure of database encryption module is shown in Figure 1.

![Figure 1 Database encryption module system structure](image)

Automatic retrieval and update is a common function in computer software, which should be introduced into the system design stage. Automatic retrieval can be used to determine whether there are functions in the software that need to be updated and improved, so as to help solve problems more efficiently and establish a suitable environment for the next system update task. In many schools, the reform system of computer application technology course is incomplete and there are many problems, so we should enhance the update speed of computer application technology knowledge and effectively improve the teaching efficiency of computer [14]. At the same time, Internet technology should be applied to teaching reasonably, so that students can intuitively learn computer operation methods and understand complex computer operation procedures, thus providing effective guarantee for the teaching quality of computers. Automatic intelligent technology is commonly used in current software development, and it also accords with the development direction of network technology. It connects each functional layer in series and improves the software program, so that the information update function of network system can be realized in the ancient process of running. Fig. 2 is the flow chart of software control system fault diagnosis algorithm.
Good service can promote the overall development of enterprises to a certain extent, provide personalized services and meet the requirements of different customers from multiple angles, which can help improve the competitiveness of enterprises and increase economic benefits. However, the advantages and disadvantages of computer software technology coexist for users, and it will also bring new problems to staff, so it is necessary to pay more attention to the application of computer software technology. The significance of software lies in using the setting of program logic to meet people's plans and needs. Only after customers have a good experience can software be accepted by customers and even the society. An effective software includes complex programming such as programming, business logic setting, packaging and packaging, and needs to be accepted and recognized by the society. After the automatic update plan is determined, through the mutual connection among various control functions in the software, when there is an update reminder in the software, this situation will be fed back to the development system, and when the function instruction is received, the computer operator will be asked whether it needs to be updated, and the time that does not affect the normal function use will be selected for update processing [15].

In the prototype method, we pay attention to the preservation of basic functions, constantly improve and upgrade the basic functions based on their realization, and introduce deeper functions. The prototype method can help restore basic functions and develop other deeper functions based on the realization of basic functions. When the developed software is put into the market, professionals should carry out system test according to the flow chart in Figure 3.

In the application of computer software technology, the use of some software will affect people's work and daily life, and will produce data security and other related problems. Relevant technicians
should ensure the security of software and do a good job in network security, so as to ensure the safety of users' data, safeguard users' interests, do a good job in security monitoring and quickly solve the related problems of computer software. In the construction of software quality assurance technology system, it is necessary to take system quality as the foundation and put it in the core position, taking into account the environmental characteristics of software, software form, user satisfaction, user experience, etc., while meeting the development functions, improve the service quality and feasibility of software, and provide quality assurance for the safe operation of software system. In the process of using computer software technology, enterprises will store the collected relevant data information or the original important data information in a special enterprise database, which can not only improve the working efficiency of enterprises, but also bring certain convenience to their customers.

5. Conclusions
With the development and application of Internet technology, it occupies an increasingly important position in our lives. In the Internet age, the difficulty of developing software is obviously reduced. What is important is how to develop a software with customer demand and high market penetration rate. Under the background of big data era, the application of computer software technology should not only be constantly improved and optimized in practice, but also be truly integrated into people's daily life. There are still some problems in the development of computer software. Software developers should fully combine the functions and practicability of software, improve the development quality and efficiency of application software in strict accordance with the principles of standardization, easy maintenance and simplification, and provide users with a better application software environment, thus promoting the rapid development of computer industry. The long-term development of computers depends on the continuous development of software development technology, which can create powerful conditions and improve the social service value of computers. At the same time, computer software development should be "people-oriented", realize the sustainable development of software development technology, and provide the possibility for building a perfect computer network system. Only when we have a good understanding of the needs of the current society and gradually improve the intelligent and innovative software technology can we help people deal with daily work and things quickly and accurately.

Acknowledgements
The authors acknowledge the "Internet + Ecological Agriculture" informatization targeted poverty alleviation e-commerce platform construction (Grant:2016XJ45).

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