

# Research on the Application of Computer Software Development Technology in the New Period

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**Keywords:** New era, Computer, Software development, Technology application.

**Abstract:** With the continuous updating and development of science and technology, computer software has become an important part of social development, and its application in people's production and life is more and more extensive. The computer system has relatively strong storage and transportation functions. The development of computer software promotes the diversified and comprehensive development of the network. It has important advantages in social competition. In the process of computer research and development, it is necessary to analyze the development of innovative computer software in depth. This paper mainly expounds the basic status quo of current computer software development technology, and discusses the important role and development trend of computer software development.

## 1. Introduction

With the continuous development of social science and technology, China has entered the era of network information. In this context, computer technology has greatly promoted the overall development of society and changed the lifestyle and life rhythm of modern people. The specific reasons for this, the continuous improvement of computer software development technology is an important factor influencing the continuous development of computers [1]. Computer software development technology is also produced to meet the needs of social development. Under the new era background, the role of computers has been diversified and has been involved to a large extent in many fields. This situation also shows the importance of computer software development technology. It can be said that computers have brought great convenience to people's lives, and the popularity of the internet has also led to the development of computer technology. Computer software development technology is a technology function system realized by programmers through code. It is necessary to study the development and current status of computer software development technology. Exploring the development trend of computer software and technology application are also issues that Chinese research institutes need to consider [1]. The efficiency of computer software development should be improved, and its value and service should be improved to ensure the continuous improvement of computer technology.

## 2. The computer software industry overview

### 2.1 The software industry is developing rapidly.

Under the state that the impact of the financial crisis on the world has not been eliminated, more and more elites around the world have not hesitated to invest in the software development industry, which has injected vitality and vitality into the software industry. The wider the scope, the more scientific and technological forces are applied to it, but with the increase of industry, people are not realizing that the software can bring economic benefits and intellectual property rights, which makes the piracy industry move from darkness to light [2], seemingly savvy companies and consumers are blinded by the interests of both eyes, the purchase of genuine software is ridiculed, not to mention the real gold and silver for research and development, this is the biggest stumbling block in the development of the software market, and it is imperative to reorganize the software market. It is also a prerequisite for the long-term development of the software market.

The user's use of computer image representation is to use the brain to innervate the limb movement to meet the automation requirements of their own field. The software is divided into system software and application software. The initial development of software was generally done manually. Finding errors in thousands of codes is like finding a needle in a haystack. The problem of running software is enough to keep developers from sleeping [1]. On the contrary, customers have a taste for software functions. Higher and higher. The development of social and economic diversification has put forward the demand for large-scale and complex software development. The manual operation has been unable to meet the expansion of software functions. The principles and methods of engineering are gradually applied to software code writing, operation, function maintenance and performance repair. And management of development files.

Computer software development is a large-scale work that needs to be done by teamwork. The core of software development is that user needs are the top priority. The idea of software design ideas and methods is based on the user's manual operation status. It includes providing requirements, algorithm design, System design of overall structural design, module design, function implementation and program joint debugging, software testing [2]. Whether the software development technology is first-class, it can reflect whether the manual operation can be completed by the software system or even better. The network support, virtual cloud application and remote control greatly satisfy the user's various individual needs and promote the computer. The network has become a cooperative community of software engineering interdependence.

## **2.2 The quality and quantity of software talents.**

In recent years, various colleges and universities across the country have opened different levels of software majors in this specialty, and some colleges have established software colleges [3]. The large number of software talents required by enterprises are obtained both in quantity and quality.

## **2.3 China's software industry share status.**

In recent years, the government has vigorously supported some software development companies in terms of funds and policies, which has enabled China's software industry to develop rapidly, constantly catching up with the level of developed countries, and especially doing some government projects to make software companies rich. profit. With the support of all aspects of the government, more and more Chinese people are optimistic about this sunrise industry, and are committed to taking a share in the software industry [2]. The value of tax revenue continues to hit new highs. The international software market has cast olive branches to Chinese software companies. China's software industry has made the world stunned, and the proportion of total industry profits is staggering, indicating that China's software industry has broad prospects.

## **3. Problems in computer software development technology**

From the development in recent years, China's computer software development technology has been greatly developed, but with the development of society and the increasing demand for computer software development, as well as social changes, it is undeniable that China Computer software development technology is lacking in many aspects.

### **3.1 The core level of computer software development technology is not high.**

The time for computer software development in China is relatively short. At the same time, there are still some problems in China's technology in terms of personnel training and environment creation. At present, there are still gaps in core technology in computer software development in China. Most of the core technologies are in the hands of developed countries. China's related technologies cannot meet the needs of social market economy development in terms of quality, and have a certain degree of hindrance to the development of China's state [3].

### **3.2 The lack of talent is serious.**

Software development requires the relevant technology as a support, while talent is also the most

important factor. Only under the support of talents can related technologies and software development activities be carried out effectively, but the current reality in China is not the case. There is no shortage of people who are specifically responsible for the implementation of the project, but what is lacking is some high-level talents with innovative ability and management ability, because software development needs constant innovation, and innovation needs to be fully integrated with the actual situation of the society, if there is no correlation. High-level talents China's computer software development level will be difficult to improve [4].

### 3.3 Poor product structure.

Although China is constantly adjusting, due to the lack of core technology, the technical content of the product is low, and the brand technology has not been formed. On this basis, the structure of China's software products still has much room for improvement. .

## 4. Common computer software development methods

### 4.1 Software software development method for software life cycle.

This method is mainly based on a series of problems of software splitting from the perspective of time. It is divided into several stages, and the standard of each stage is carried out in the stage of division. Emphasize that the software life cycle usually consists of six phases, about nine months [3].

### 4.2 Automatic form of computer software development method.

This kind of software development method mainly uses the software in the fourth generation technology as the development tool, which emphasizes the implementation goal and specific content of the software, but does not specifically explain how to achieve it [4].

### 4.3 Prototyping computer software development method.

If it is difficult for software developers to determine the effect of the algorithm and the applicability of the system, or can not describe the software target given by the user in detail, then you can choose to use the prototype computer software development method [2]. At the same time, relevant developers must comprehensively analyze and identify the relevant issues and overall functions of the system during the initial stage of software development, shown as Fig.1.

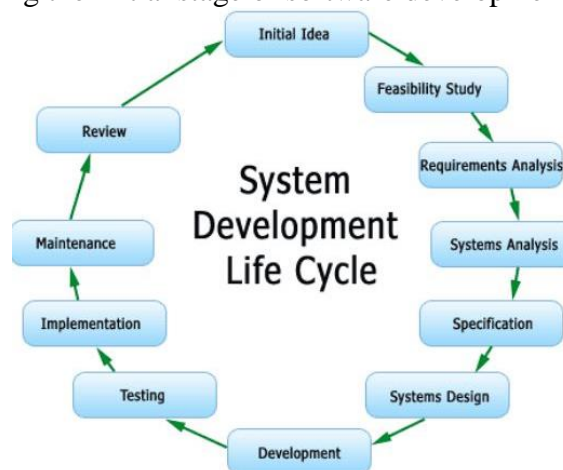


Fig.1 Computer software development process

## 5. Application of modern computer software development technology

The most direct motivation for the development and design of computer software is to ensure real-time, to improve the existing computer system programs, or to provide new software functions to further the daily life, study, work, and social and economic coordination of the public. Sexual development, providing scientific and humanized support conditions [5]. From this point of view, any type of computer software development technology that wants to achieve tangible success must be

pre-examined through different application channels. As for the application points of different types of computer software development technologies, the details are as follows.

### **5.1 Common computer software development techniques.**

Through actual investigations, it is found that there are many types of computer software development technologies currently being used in China, including Java Web, PHP, and .net, among which the first two types of development technologies are the most popular, mainly because they are suitable for large-scale development. The project, which contains more open source frameworks, ensures that program personnel can develop higher performance and higher quality products in a short period of time. The PHP development technology is characterized by simple entry and relatively low requirements, so it is most suitable for some small-scale and easy-to-use technical projects. In addition, it shows the faster development rate and cost [5]. The .net development technology application process is mainly based on C language and XML, SOAP and other standards integration, which can ensure interactive communication and cooperation with other software platforms.

### **5.2 Object-oriented computer software development technology.**

Under the background of the continuous reform and development of computer technology in China, the working environment related to software development has become more and more cumbersome. During this period, the application software must ensure the functional characteristics of cross-platform operation, so that users can be satisfied in real time. Constantly strict use requirements. It should be noted that computer software development technology always demonstrates a relatively deep open feature, because the opacity of the development technology in the past has made the system structure mechanism and the post-maintenance process more complicated, plus various application areas and the difficulty of function development, as well as the high cost of cost, will inevitably lead to a full range of constraints on the updating power of computer software [6]. In contrast, object-oriented software development technology itself retains multiple features such as full expansion and structural openness, which guarantees the drawbacks of traditional software development techniques, making modern computer software development technology a new life. vitality.

### **5.3 Web-based software development technology.**

In the process of continuous innovation and development, computer software has made the network universally popularized. This is the main reason why we have successfully ushered in a new era of network communication. At the same time, because of the diversification and efficient expansion of network technology, Provide clear direction and guidance material for software development technology engineering. Taking wireless network technology as an example, it has provided convenience for the development and promotion of mobile APP software in the process of perfection [6]. After that, Chinese Internet technology began to show the digital and informational features simultaneously, for the future. The foundations of the close ties between countries and the development of globalization have laid the foundation.

## **6. The development trend of computer software development technology**

### **6.1 Networked.**

This is the inevitable development trend of modern computer software development technology. It is necessary to know that the application of computer software always depends on the network. On this basis, it will help achieve its win-win goal with the network. In the meantime, the network can be regarded as the development and application platform of computer software [7]. Under the premise of ensuring real-time scientific and humanized service for software development, it will provide for the rapid dissemination of various software products and market space development in the future.

### **6.2 Service.**

The practical significance of software development technology is to ensure that the software

application requirements of various users can be met in real time, so that it can deal with many problems in personal life, study and work more quickly and flexibly. Because not all members of society have high-level computer expertise, it is often necessary to use software such as the link between the construction and computer functions [7]. In this context, as a qualified software development programmer, its core mission is to rely on the most high-end technical elements, the most humanized development design concept, to meet the application needs of existing users as much as possible, so the service will be another important trend in the development of computer software development technology in the future.

### **6.3 Intelligent.**

After a certain algorithm is developed and integrated, the software can be intelligently operated, so that the computer system has the same thinking and running ability as people [6]. The implementation of such intelligent functions can be said to be a major milestone in modern computer software development technology, and it is worthy of vigorous promotion and implementation in the future.

## **7. Summary**

In summary, computer software development technology has become a key component of China's innovative technology system, and it has an extremely effective support service for the sustainable development of different industries. Especially after the popularization of computer network technology, people can use this kind of software to communicate with each other, file transfer and payment transactions. Therefore, the comprehensive development of the development process of computer software development technology does have important practical significance for China's long-term development strategy. It is hoped that relevant leaders and technicians will continue to pay attention to it.

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