

Research on the Modern Technology of Computer Software Engineering

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ABSTRACT. With the changing needs of people and the continuous development of social economy, the application of computers is more and more extensive, and it is also a new and independent technology has become an indispensable part of the development of major industries, and the development of computers must be inseparable from computer software engineering. This requires us to focus our research on computer software engineering. According to the current situation of the development of computer software engineering in China, the author discusses the strategy of strengthening the modern development technology of computer software engineering, and hopes that the modern development technology of software engineering in china will have a role to play, and the deficiencies will be expected to be corrected by everyone.

KEYWORDS: Computer, Software engineering, Modernization

1. Introduction

Computer software engineering has been used by people in all fields of production and life, it can be said that the modern development technology of computer software engineering has a positive effect on promoting the modernization of society. Although the development of computer is faster and the application scope is more and more extensive, but because most of the technology used in China is derived from developed countries, as far as China's computer software engineering technology, there is still a lack of a perfect system of its own development, china's computer software engineering development has been affected for a long time [1].

2. The Current Situation of Modern Development of Computer Software Engineering

The so-called computer software engineering, in essence, refers to the software product design and development process, design, developers in strict accordance with the relevant standards, norms, adhere to the relevant principles, relying on computer and computer software tools, software products design, development and management maintenance. In recent years, computer software engineering technology has been widely used in all walks of life, many fields, and science and technology and other related advanced technology to achieve effective integration, involving a very rich content, a very broad range. Through the study of computer software engineering products and services, we can learn about the policy system, laws and regulations of computer software engineering from the whole process of technology research and development, result transformation, effect evaluation, etc. , and provide protection for a deeper and comprehensive understanding of computer software engineering [2].

Because of the continuous development of computer-related technology, both hardware facilities and software technology have been developed by leaps and bounds, which makes computer software applications more and more extensive. On the one hand, the connection between computer technology is getting closer and closer, and through the coordination of this kind of software engineering, various computer technology has achieved a benign coordination. On the other hand, because of the improvement of computer software technology, the development of today's society and economy has also played a positive role in promoting. Software engineering with the continuous popularity of mobile terminals and electronic devices is also more and more applications around people [3]. It can be said that our production and life has been inseparable from computers and software. Nowadays, both computer hardware and software facilities are moving towards higher standards, and the demand for software engineering in turn is driving the development of software engineering.

As far as our country is concerned, the modern technology of computer software engineering has been developed better. The research on software technology in computer software engineering can promote the development of software systems quickly and promote the high-speed operation of the economic model of the software industry under the

requirements of the socialist market economic system. Software engineering is a hierarchical model that covers supporting software, system software and application software, and it is precisely because of this special mode of operation that the application of modern technology of computer software engineering is more and more extensive in the industry [4]. However, we must point out that, limited by various factors, our country's computer software engineering modernization technology has shown the characteristics of lack of power, and because our country's computer software engineering relies heavily on foreign advanced technology and lack of independent innovation and technical support, making china's computer software engineering development prospects appear hindered. Looking at the development of computer software engineering modernization technology in China, to change this dilemma, we have to improve the innovation ability of computer software engineering modernization technology, and at the same time work out effective independent research and development technology. As most of the applications in China are introduced from developed countries, which causes us to have no core independent research and development technology, so we are very necessary for the research and development of the core technology of computer engineering. Because only if we have our own independent technology can build a digital intelligence management platform. At present, China's software research and development is too focused on personal concepts and neglect the scale and industrialization. Computer software engineering involves more complex content, and each link is closely related, it can be said that a link of the problem will inevitably affect the development of computer software engineering [5].

Computer software is a kind of core technology and important product in the informationized and modern society, with the rapid development of economy, society, science and technology, computer software products and services have been systematically updated, and are widely used in all walks of life and many fields. However, in the process of the development and application of computer software engineering modernization technology, there are still many problems that need to be solved urgently. Such as the lack of comprehensive planning, their own characteristics, a considerable part of the role can not be fully played, the computer software engineering modernization technology development and application has a huge impact, great resistance to technical personnel to attach great importance to, extensive participation, and actively promote implementation, and gradually establish a standardized, standardized, intelligent, digital, network control platform, from the system, comprehensive level, for the computer software engineering modernization technology development and application to lay a solid foundation [6].

3. Problems in the Development of Computer Software Engineering

3.1 Software Engineering Industry Chain Destruction

It is precisely because most enterprises and individuals in the absence of detailed market research into the field of computer software engineering, the competitiveness of various computer software is also declining, software is difficult to form a benign link between the software, mostly just alone, so that the original positive and benign software engineering industry chain was destroyed, and let the industry chain towards the development of the development of software engineering is more and more difficult, the development of software engineering is bound to be restricted. In this way, the formation of a vicious cycle, whether it is individual enterprises or software engineering industry because of the destruction of the software engineering industry chain has been restricted, thus curbing the development and progress of China's computer software engineering modernization technology [7]. Different from the limitations of other industries, computer software engineering has its own core technology and industrial chain, while it and other industries of the industrial chain cross each other, in most of today's industries computer applications are more extensive, many industries can not even completely separate from the computer applications, once the computer industry chain is destroyed, will inevitably affect other industries [8].

3.2 Lack of Innovation and Practicality in Software

Because many enterprises blindly enter mostly for short-term benefits, they lack the market investigation and research, so can only imitate and reference the larger companies of excellent software features. Although this approach can be in the short term for enterprises to obtain more profits, but this kind of imitation and lack of innovation is not conducive to the progress and development of the computer software engineering industry, this illusion will make more and more enterprises do not strengthen their own innovation ability but to imitate, once the formation of such wrong thinking, the long-term development of software engineering can not be guaranteed. In addition, because of the simple imitation and their own technology and ability is not guaranteed, the use of computer software value is relatively low, not conducive to the benign development of the industry [9]. Innovation is the inexhaustible driving force of enterprise development, in the face of the rapid development of today's society and the continuous improvement of people's needs, to ensure their competitiveness needs to constantly in the premise of market law on the premise of products and services innovation, on the basis of practicality to fully consider the user's experience and needs, only in this way to achieve the development of enterprises. It can be said that the lack of innovation and practicality has become the majority of

computer software engineering enterprises can not guarantee strong competitiveness of the important link [10].

4. Countermeasures for the Development of Software Engineering Modernization Technology

4.1 Strengthening Product and Service Innovation

In the process of the development and popularization of computer software engineering modernization technology, the relevant technical research and development departments and technical personnel must realize the importance of product quality and service effectiveness. The innovative product mode and service drive as a normal, basic work, from the product structure optimization, service model innovation and other aspects, as far as possible to meet the needs of market diversification. Since the 21st century, with the further acceleration of the pace of global economic integration, domestic and foreign market competition is becoming increasingly fierce, enterprises face market development opportunities at the same time, in the face of huge market competition and challenge pressure. In this special era background and historical conditions, in order to maintain their market position, to ensure that market share is not broken down, enterprises must establish a set of feasible and competitive products, service innovation system, enhance the core competitiveness of the products and services market.

Through the research on the development trend of computer software engineering modernization technology in China, it is found that the modernization technology of computer software engineering is developing in the direction of informationization, intelligence and digitalization, and the technology system with information service and communication technology as the core. Only by increasing independent research and innovation and technological innovation, we can fundamentally solve the problems of technology, trade and so on, so that enterprises can obtain more abundant innovation momentum, for the rapid development of the economy and society to provide protection.

4.2 Increase the Protection of Independent Property Rights

The development of computer software engineering modernization technology can not be separated from the diversified innovation of technology, products and services, only through continuous innovation, comprehensive strengthening can be invincible in the market. At the same time, we need to give due attention and protection to the key and core technologies, constantly optimize the investment structure, innovate the service mode, and take independent research and innovation as the development strategy goal. Under the system of market economy sharing mechanism, computer software engineering-related enterprises need to build a perfect system of technological innovation in order to maintain and guarantee the service quality and service efficiency of software engineering products, further accelerate the upgrading of industrial structure and the pace of intellectual property protection, and promote the sustained and healthy development of computer software engineering modernization technology. In addition, in the process of upgrading the modern product and technology research and development capability of computer software engineering, we also need to establish a sense of intellectual property protection, have a certain understanding of intellectual property rights, and provide property rights protection for independent research and development technology, products, etc. , so as to achieve the goal of incentivizing technology research and development personnel.

4.3 To Play the Function of Government Management and Strengthen Product and Service Innovation

The government can set up a computer software engineering fund to ensure the development of computer software industry, provide a solid backing for new industries such as computer software engineering, will be used for computer software engineering investment and financing channels to further expand, with funds to encourage the development of software engineering modernization technology, encourage private investors to invest in the industry to ensure technology research and development, so that private investment can participate in the technical field, so as to strengthen the intensity of investment and lay a prerequisite for the development of computer software engineering modernization technology. However, it must be clear that in order to achieve the virtuous circle and development of enterprises, relying on government macro-control alone is certainly not enough, at this time we must strengthen their own products and services innovation. In the traditional computer software operation process, there are many structural and functional defects, resulting in low efficiency of software manipulation, software itself quality and user needs are different and other problems. At present, china's computer software engineering modernization technology development is an important limitation is the lack of independent innovation ability, so in order to achieve the benign development of computer software engineering must strengthen the importance of independent innovation ability, and constantly strengthen the transformation of research and development results to civilian products, to achieve the balance of scientific and technological products and market demand. Because of the development of world economic integration, whether national competition or enterprise competition are more and more intense, only to find new economic growth

points can ensure that enterprises and countries in such fierce competition in the market competition to maintain their unique competitiveness, including products, technology and services, including the construction of computer software engineering system, in order to provide a constant impetus for the development of computer software engineering modernization technology. At present, the development of computer software engineering in China is still relatively narrow, mostly in the field of communication technology, information services, network media and other fields, to improve the field of market economy independent innovation capability is particularly necessary. Only in this way can the development of computer software engineering and all walks of life adapt to ensure the continuous development of the national economy, only by constantly accelerating product innovation and upgrading, can we always ensure the vitality and status of modern computer software engineering technology. At present, in order to meet the needs of enterprises in all aspects of the direction of digital and intelligent development, this direction of development is also the requirements of enterprise product innovation. Computer engineering technology should coincide with industry to improve the competitiveness of China's computers. The upgrading and innovation of technology products and services can effectively promote the development of software engineering and ensure the autonomy of technology in the research and development process.

5. Conclusion

Computer technology, information technology and network technology, as the main driving force oriented in modernization, are closely related to economic growth, social development and people's production and life. Under the background of informationization, networking and economic globalization, we can achieve comprehensive, coordinated and sustainable development only by paying attention to scientific and technological, information technology product research and development and service innovation. Through the research on the current situation of the development of computer software engineering modernization technology, it is found that there are many shortcomings and problems, only through the government to provide security mechanism, strengthen product and service innovation, increase the protection of independent property rights and strengthen the management of software product upgrading, can we provide a strong development impetus for the modernization of computer software engineering technology, can meet the diversified needs of economic market development, can we lay the foundation for promoting comprehensive and sustainable economic development.

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