The software development process management research

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Abstract

Increasingly complex with the wide application of computer, computer program, the software development is more and more difficult to solve for the problems: no specification, software development process of software without order, without practice in Japan, not sure, requirements, and progress out of control, unpredictable process capability, etc. Control the software development process is necessary to ensure that produce high-quality software.

The American association of software engineering is put forward and perfect the software education rib maturity model (CMM)} Rational company put forward the development of a unified open frame set routine method (RUP), has been adapted for use by many software companies in the world. CMM specifies the software development should be "what" standard, RUP is a kind of can achieve the standard of the concrete implementation process. A lot of small software enterprises in China software development is not standard, the present situation of the development process without control, this paper according to the levels CMM1 and CMM2 part of the standard, through to the RUP tailoring of the process, work out a suitable for small software enterprise software development process management mode, each phase of software development management and control, to ensure that meet the customers' requirements to produce the high quality of products. The model of the iterative development and object-oriented development method, using the core work flow of RUP as a process framework, its key process areas include software requirements management, software project management, software quality assurance and software configuration management.

1.Introduction

With the further perfect of the market economy and global economic integration speeding up, the enterprises face the fierce market competition, the enterprise internal and external information exchange has become the urgent needs of the enterprise development, participate in competition of the market economy.

Companies to introduce advanced information processing technology, increase the degree of information sharing, will not only improve the work efficiency, reduce cost, but also improve the scientific nature of the enterprise management and the degree of automation. Information has become the basis of enterprise survival and development. The rapid development of computer and communication technology, especially the development and popularization of the Internet technology for the enterprise internal, enterprise and the external provides quick, accurate and reliable information communication channel, the information highway has changed the enterprise and

enterprise, enterprise and customer, enterprise internal decision makers and managers at all levels and the information communication between the management personnel, effectively promote the enterprise take the customer as the center of the cooperation between departments, real for the enterprise to realize the change of the mode of operation and management mode have laid a solid foundation. Information of enterprise operation management system has become the enterprises and institutions in the global market competition, a necessary support system.

IT is because of such development present situation, market demand and technology for our country's IT industry has brought the unprecedented development and meet, especially software industry. Software enterprises can seize a rare development opportunity need various efforts, including software development management and quality control is very important in the development of its position.

2.Meaning

With computer application in scientific research, national defense, the computer program is becoming more and more complex, more and more difficult to solve for the problems of software development. For example: demand analysis; More and more error; Money, time limit for a project can not get control, etc. Maintenance problems, in particular, to occupy a large amount of manpower and material resources, hampering the development of new products, which led to a series of "software crisis", thus, was born in view of the software crisis "software engineering". With the continuous development of

software engineering, relieving some of the impact of the software crisis. Current social demand for software continues to grow, enterprises face the fierce market competition, the enterprise internal and external information exchange has become the urgent needs of the enterprise development, participate in competition of the market economy. People's Daily life is inseparable from the information technology, the rapid development of Internet has fully proved this point.

3.Software development methods

A software life cycle model, should have corresponding software development method and the matching. Technical approaches to develop software, are required to complete a series of different properties of work. No matter what is: sure what "to do", "how to do it", and "implementation" and "perfect". Adopt different development strategy may change the order of the work elements, name, and relative importance, but they can't ignore any one element. Because every software system more or less its particularity, therefore, should be according to the characteristics of the need to develop software, choose the most appropriate development strategy, and select the suitable development method is suitable for this strategy.

Conclusion

In the process of management of software development, always adhere to the dominant idea of iterative development. Because the traditional waterfall deep influence to software developers, people always used to get things done at a time. It

may be doing other things when it is necessary, but used to guide the development of software system, especially the management application software development is very dangerous, easy to cause huge waste of human resources, that affect the construction period.

Let all the developers to build up the concept of market economy, set up ideology of the customer first. On the surface, this is not too much for software developers, however, all steps of the unified software development process are built on the premise of maximum meet the user requirements. Only to establish customer supreme service consciousness, can we truly understand the real meaning of various specifications, thus on own initiative in accordance with the requirements of the specification.

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