

Software Project Management

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Abstract

With the rapid development of information industry, people increasingly realized that project management in the application development of software enterprises is an effective management method, thus the application of project management in software development is increasingly affected by day.

Keywords:Software development;phase change management;quantitative management

Along with the rapid development of information technology, the growing and the functions of the software requirements increasing, the scale of the software product is becoming more and more big, the last one to develop software has ceased to exist, the history of software development now generally need to complete one or more group work

1. The importance of software project management

Tell from the cloth is read, a software project management is to make the software project can according to the predetermined smoothly into wood, schedule, quality, and to personnel, products, process and project analysis and management activities. Project management activities include measurement and measurement, estimation, risk analysis, scheduling and tracking, quality assurance, configuration management, etc. Management is through planning, organizing, control and so on a series of activities, configure and use resources reasonably, to achieve the goal of

the process. Project management is in a certain constraint conditions, in order to efficiently achieve the goal of the project for the purpose, based on the personal project manager responsibility system to the project as a separate entity for accounting, according to the project within the logical law of effective planning, organization, coordination, control, system management activities, ensure project smoothly according to the predetermined Hu Chengmu, schedule and quality

2. The method of software project management

(1) the stage management

Phase change management refers to from the beginning of the project until the whole process of system operation maintenance, the project is divided into small stage. For example, are usually divided into problem definition, feasibility study, demand analysis, general design, detailed design, coding, testing and maintenance and so on several stages. Every stage has clear goals and results of the acceptance, as well as the necessary supervision and feedback, so can reduce the project director and customers differences, reduce the project risk. The project director in requirement analysis and the initial report submitted to the client, he has every stage work to be done, but the results, specific to how many circles and even, can clearly describe them. So, at each stage, after the completion of customer and project director can more clearly understand the progress of the project, and customer satisfaction with

the project completion of parts. At the same time, it is convenient for team member's performance evaluation

(2) the quantitative management

The project of the quantification and as much as possible, do the responsibility clear. Do software to the customer, often encounter this kind of question: B Bi enterprises such as a stage results said, including B1, B2, B3, different magic came out, the client, may think B1, that accords with a requirement completely B2 root wood is not right, B3, though there is something wrong with change can also be used, etc. So, where is the problem? Responsibility the negative by who? Therefore, must take all kinds of targets, such as investment, quantitative classification. Expressed in specific modules or subsystems, for example, the needs of customers, the precise calculation of B1, B2, B3 spent every part of human, material and financial resources, and so on, all kinds of quantitative indicators in the database, can easily solve the above problems

(3) the optimal management

Optimization of management is to analyze each section contains the project knowledge, experience and lessons, to better promote the experiences of project progress, lessons learned, spread across the company useful knowledge. Before such as example, through the analysis found that B1 part leader ability is strong, can let him take a few people, after his knowledge and experience play a better effect. B2, B3, part of why you don't succeed, it is the demand of the customers didn't ask clear, is to understand the error, or design problem?

3 influence elements of a software project management

(1) reliable demand analysis

Software requirements is a software project is the root of the wood, unclear requirements,

work, there is no direction, so the first factors affecting software project is project to have a reliable demand analysis. Demand analysis should be project related personnel agree, clear, complete, detailed, achievable and testable. Demand determine, developers should seriously listen to the views of users, and make record, again and again and customer communication, can't take it for granted to his imagination as users demand one among them is to emphasize that the project starts later, don't change the demand to the greatest extent possible, to make a good communication with the user, in order to ensure the development work can be carried out in accordance with the requirements. Only those who have a reliable demand analysis, project sent to sichuan, wooden guarantee

(2) the feasible project plan

Clear the project goal, also must have a workable plan. Software project plan to complete is the purpose of software engineering and project management software. At the start of the project, the priority for the plan

(3) in the process of the project operation and the formulation of the system

1. Planning: overall planning, the stage plan, weekly plan, and clear plan for completion of the inspection process;

2 system, make the meeting system, progress report in the process of project operation system, appraisal system, file management system, cost management system, all kinds of coding standards, testing requirements, etc. Have the corresponding plan and system, in the process of project management can achieve target, have some benefits to the successful completion of the project

(4) the standard operation procedure

The operation of the project management process includes: the project started, planning, formulation, implementation, process control,

project end of the party and the content. Software development process is very standard and systematic, the enforceability of its process is very high, and can continue to improve in the process of practice. Process is to ensure that the project is one of the key success factors. Through process can achieve a standardized, assembly line, the industrialization of the software, so as to achieve a successful project management. To each phase of the software project are to make the work plan and pay the relevant departments supervise the implementation, after the end of the stage, to evaluate the stages of work activities, and the subsequent stages of the time, personnel, funds demand and estimate

4 effectively communicate

Software project implementation for the dependence of the people is more outstanding than other industry, it is a strong knowledge of work, so the management of people is very complex, how to strengthen the effective communication between the people, is a key to the success of a software project. This communication includes two parties: one is the software project developers and users of communication; Another is the personnel in the software project team communication. Communicate with the user's main is clear to understand the needs of the user, this is a solid foundation for the project implementation. Staff in the group communication helps after clear user needs, can make the project progress as planned, the last is likely to complete the software project

5 complete project documentation

Software project documentation is particularly important in the position and function of the entire life cycle. Document as the main form of software products, embody a concentrated reflection of software

personnel work, no document, not software. Every stage of the software development process document is not complete, often in close to the end of the project for acceptance and write up the document. The most common of which are not detailed design documents, in the process of program development, developers tend to maximize their own programming skills, so that in the later maintenance, because there is no detailed design documents, difficult to maintain in the latter phase of the project. Although the writing of the document will spend a lot of time and energy, but with good documentation, to the late development work to bring a lot of convenience

5.conclusion

In a word, software project management covers the technology and management and so on various knowledge, have in the success or failure of the software project development have very important sense, it is one of the key factors of success for a software project. In the process of software development, must set up should not only pay attention to technology, and to pay attention to the consciousness of management, improve the level of software project

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