

What is SPM

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Software Project Management

Abstract

Software project integrated management is to point to in the whole life cycle of the project, the comprehensive project management knowledge areas, integrating all component of the project plan, implementation and monitoring, to ensure that all the elements of project coordination of all the work and activities.

And different from time management, cost management, other individual management. software project integrated management from a global and comprehensive point of view, with the combination of timing, unity and coordination of project elements (project scope, time, cost and quality, etc.), the mutual influence and restriction of the specific goals and plans of the weigh the pros and cons and optimizing choice, as much as possible to eliminate the limitations of each single item management and extreme sex, maximum limit satisfy stakeholder and people's needs and expectations.

Keywords: software project integrated management, unified coordination, needs and expectations

1 Introduction

Scope management, time management, cost management and quality management are the four core areas of software project management, there are interdependence and mutual constraint relationship between them. In general, the scope of the project, the project time and often contradiction between project cost, the relationship between the need to balance the three, but in adjusting the three relations, should pay special attention to affect the project quality.

- (1) Optional change scope of the project is one of the important factors that caused a large number of quality defects. Due to there are difference unit know between software developers and user, That will lead when appear in the process of demand for demand of incomplete, unclear, scope changes are inevitable. So we should change of scope of scientific assessment of risk, and strictly implement change procedures.
- (2) Progress is not reasonable project prone to quality hidden trouble. Should certification review project progress plan is scientific and reasonable and leave room, due to serious quality problems were forced to rework the schedule is out of control.
- (3) The unreasonable budget of the investment will also lead to quality problems. Often leads to low budget technical review, review and test quality control links such as the lack of or will arrange some poor technical level low wages are the personnel engaged in the development work, resulting in quality control.

For a project, project management ideally four factors ", quick, good, province ". "More than" refers to the scope of work. "Fast" refers to the time is short, the "good" refers to the high quality, "provincial" means the cost is low.

Of course, it is difficult to ensure that each index in the actual project the best at the same time, the software project integrated management can achieve such a goal: on the premise of ensuring project quality, strive for the project scope, project the balance between the three time and project cost.

American project management institute (PMBOK2004) definition of integrated project management process includes the following:

- (1) to develop project charter -- --- approved project or a project phase.
- (2) develop preliminary project scope statement----- summarizing how the project scope.
- (3) the project management plan ----- make plans, writing, coordination and combination of all individual activities and form document, making it a project management plan.
- (4) direct and manage project execution ----- the implementation of the project management plan to determine work, implement the scope of the project target, time, cost and quality goals.
- (5) monitoring projects-----supervision and control of project initiation, planning, implementation and closing process, realize the project management plan identified in the project goals.

2 Methods/Techniques

Common progress planning tools mainly has two GANTT chart and engineering network. Gantt chart with a long history, concise, easy to learn and easy to draw the advantages of intuitive, but it can't clearly said all tasks depend on each other, also cannot clearly show the critical path and key task, the key part of schedule is not clear. In managing large software projects, therefore, is not enough to only use Gantt chart, not only difficult to make both save resources and ensure the progress of the project, but also prone to error.

Engineering network not only can describe the task decomposition and the start time and end time of each homework, but also clearly says each homework dependencies between each other. Easy to identify the critical path from project network diagram and key tasks. Therefore, project network diagram is the powerful tool scheduling plan. Usually, the combination of the Gantt chart and network these two tools to develop and manage project schedule, make them supplement each other, complement each other.

Schedule is the priority of software project plan, the project plan is the first part of the software project management. Combined with estimation method and risk analysis, schedule for project managers to set up a plan

Software configuration management (SCM, Software configuration management) is applied to the whole Software in the process of protective activity, it is change throughout the Software life cycle management of a group of activities.

Software configuration consisting of a set of related objects, these objects are also called software configuration items, they are as a result of some software engineering activities. In addition to these documents, procedures and data software configuration items, the development environment for the development of the software can also be placed under configuration control. Once a configuration object has been developed and passed the review, it becomes a baseline. The baseline object changes lead to build the object version. Version control is used to manage these objects and use a set of procedures and tools.

The change control is a kind of discipline activities, it can modify configuration object when the quality and consistency. Configuration audit is a software quality assurance activities, it helps to ensure that when changes still keep the quality. Status report to people need to know the information about the change, provide information on each change.

Common Mistakes

Lack of project management system training

Project planning consciousness

Management consciousness

Communication problems

Risk management consciousness

Project stakeholders

Within the project team collaboration

3 Conclusion

The report should finish with a summary/conclusion to give a brief overview of what the reader should remember most. What was most important?

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References

Wikipedia search terms: software project management

Browed book from library: software project management theory and case analysis