What is SPM?

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Software Project Management

Abstract

Since the software has became more and more complex and the scale of a software project has been bigger and bigger, people find it was harder to use the resource the finish a quality software on time. People need to learn and use software project management which can make sure the software can be finished on time. The theories of soft project management can help people to manage the existing budget, people, resources and analyze the rate of progress.The software project management covers the whole progress of the project. There are many skills of software project management like leadership, communication, problem solving and so on. Every person need to know what his position is and do what he needs to do.

Introduction

The software project management is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives.

The concept of software project management was presented in America in the 1970s. At that time, people has studied for finding out why the software can't be delivered on time, why the software can't be quality. They find the reason was people didn't have a good management of software project.

The contents of software project management include Project Planning, Project Monitoring and Control, Configuration Management, Human Resource Management.

1. Project Planning

Planning is the beginning stage of the project. The works of planning include identifying the scope of project, estimating the work involved of the project, assessing the risks that developers may faced with, confirming the beginning date and the finishing date and confirming the budget.

The most important work of planning is scheduling. Developers need to know what they should do in different time periods and what should be done on time. This can help the project successfully continue.

2. Project Monitoring and Control

To the software project, project monitoring is a very important work.

The software project is different from other projects . Monitoring means supervising the project strictly. It can obviously help people control the resources. Developers can get experiences by monitoring which can help them to avoid some problems in later projects.

3. Configuration Management

Actually, the importance of the configuration management is related to the scale of the software project. It is very important in those projects which have big scales.

Developers can easily manage the different versions of the software in a correct way by using the configuration management.

The works of configuration management include setting permissions to the codes, making sure that every components can be rebuilt at any time, delivering the report of the history record all changes of the software and the software should be able to merge.

4. Human Resource Management

The programmer is the biggest part of resources. Reasonable configuration of people is the determining factor of the project.

It doesn't mean that a few programmers who are very good at coding and programming can consist a good team.

The teammates should have skills like Leadership, Communications, Problem Solving, Negotiating, Influencing the Organization, Mentoring, Process and Technical Expertise.

People in the team will have different positions

which is determined by their skills. Such as the person who is good at communicating, influencing the organization and mentoring may be the project administrator. People can make the biggest contribution to the project only when they are in the right positions.

Overview

The software project management helps a lot to the developers. A software project may success without software project management, but a project with software project management can avoid risks and create more profits. No matter how bad the project was, it may improve a lot by Project Planning, Project Monitoring and Control, Configuration Management and Human Resource Management.

Summary

The software project management is still not popular today. Developers should do software project management self-consciously. The experience of the management can help people make the software industry more normative so that the software can successfully improve.

Reference

Software Project Management *Bob Hughes, Mike Cotterell. China Machine Press*