

# Software Project Management

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## Abstract

The article gives a explanation about the function and the development in future of Software Project Management (SPM). This article will tell you about the basic knowledge of Software Project Management . Whether you are just begin to learn it or have certain foundation , all of you can found things that you want to understand in this article. If you haven't decided to delve into the filed about Software Project Management, you can decide it after read this article. Maybe it isn't the knowledge that we must know , but this article can make us to understand Software Project Management better. For the sake of practicality, we will discuss about some important aspects of Software Project Management.

**Keywords:** project management , planning , organization management , content

## 1 Introduction

Software Project Management (SPM) is to make the software Project can according to the predetermined cost, schedule and quality successfully completed, and the staff, products, Process and the activities of the Project analysis, management, planned, monitored and controlled. Software Project Management is included in the Project Management.

The object of the software project management is a software engineering projects. It involves the scope covers the

whole process of software engineering. To make the software project development success, the key of this is must know clearly about scope of work, risk, needed resources (people, hardware, software), to achieve the task, experiences of milestones, spend effort , scheduling accomplish for software project. This management should be start before the start of the technical work, in the process of software from concept to implementation to continue and terminates when the last at the end of the software engineering process.

## 2 History of Software Project Management

Software project management is proposed in the mid-1970s, the United States, when the US found in software development can't be submitted on time, budget overruns and can't required for user, and found that 70% of the project because of mismanagement cause, not technical reasons. So software developers began to pay attention from the management of software development.

## 3 Overview

The mainly content of the software project management includes the following several aspects: the organization and management of personnel, software metrics and software project planning, risk management, software quality assurance, software process capability evaluation, software configuration management..... These a few respects are in the entire software development process.

## 4 Methods/Techniques

A famous software engineer called B.W.Boehm told about seven basic principles to the software development, so, in the software project management, also should follow it.

- (1) With strict management phases of the life cycle plan;
- (2) insist on stage review;
- (3) strict control to product;
- (4) using modern programming techniques;
- (5) the results should be able to clearly review;
- (6) the development team to personnel should be few and well;
- (7) Recognize the necessity of the continuous improvement of software engineering practice.

If not have project management, project is also can be succeed. But if no project management, it is difficult to keep the profits of project, for the company, it have big risk. So we're going to have the project management to keep the company in general are profitable, but not every project will make profit.

## 4.1 Common Mistakes

Communication problems within team;  
Collaboration within team;  
Consciousness of risk management;

## 5 Conclusion

The goal of software project management is to make software project throughout the software life cycle, from the whole process of analysis, design, coding, testing, maintenance, can under the control of managers, at the scheduled cost, on schedule, reduce the risk of loss and qualified to complete the software delivery users.

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