

What is SPM?

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Abstract

Software Project Management(SPM) is the art and science of planning and leading software projects. This article is aim to show you the meaning of SPM, you will not only know how to do a software project and how to do management control.but also what should you understand well so that you can make sure that your project succeed.

keywords: planning ,monitoring, software project and management control

1 Introduction

In the 1970s and 1980s, the software industry grew very quickly, as computer companies quickly recognized the relatively low cost of software production compared to hardware production and circuitry. To manage new development efforts, companies applied the established project management methods, but project schedules slipped during test runs, especially when confusion occurred in the gray zone between the user specifications and the delivered software. To be able to avoid these problems, software project management methods focused on matching user requirements to delivered products, in a method known now as the waterfall model. Specific software project management tools are useful and often necessary, but the true art in software project management is applying the correct method and then using tools to support the method. Without a method, tools are worthless. Since the 1960s, several proprietary software project management methods have been developed by software manufacturers

for their own use, while computer consulting firms have also developed similar methods for their clients. Today software project management methods are still evolving, but the current trend leads away from the waterfall model to a more cyclic project delivery model that imitates a software development process.(e.g.,[2])

2 Related Work

What is project ? It is a temporary endeavor (having specific start and completion dates) undertaken to create a unique product or service.

we can summarize the key characteristics that distinguish projects as follow,(e.g., [1])

- non-routine tasks are involved;
- planning is required;
- specific objectives are to be met or a specified product is to be created;
- work is carried out for someone other than yourself;
- work involves several specialisms;
- work is carried out in several phases;
- the resources that are available for use on the project are constrained;
- the project is large or complex.

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

The Open University suggest that management involves the following activities,(e.g., [1])

- planning-deciding what is to be down;
- organizing-making arrangements;
- staffing-select the right people for the job;
- directing-giving instructions;

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The article is based on work to study Software Project Management.

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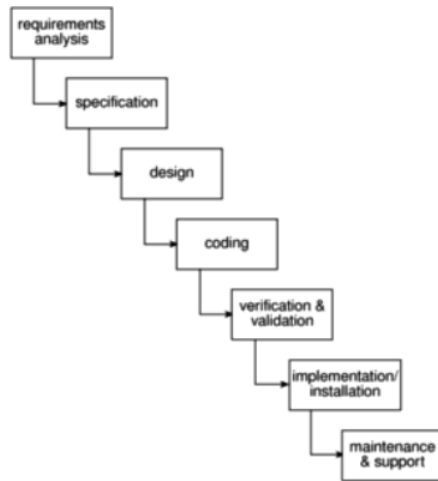


Figure 1: A typical project life cycle

- monitoring-checking on progress;
- controlling-taking action to remedy hold-ups;
- innovating- coming up with new solutions;
- representing-liaising with users etc.

3 Overview

A good SPM must contain two aspects , on the one hand , you need a good project plan ,Its purpose is to identify the scope of the project, estimate the work involved, and create a project schedule. it begins with requirements that define the software to be developed and is then developed to describe the tasks that will lead to completion.on the other hand ,Project Monitoring and Control will help your team to keep the team and management up to date on the project's progress and If the project deviates from the plan, then the project manager can take action to correct the problem.

4 Methods/Techniques

SPM is a sub-discipline of project management in which software projects are planned, implemented, monitored and controlled.So you need to understand projects and projects managements. include:

- Managing people, process and problems during a software project



Figure 2: The project control cycle

- Relating software metrics with software projects
- Estimating effort, cost and project duration
- Risk assessment techniques
- Project scheduling
- Project quality management
- Formal Technical Reviews (FTRs)
- Change management during software development and after delivery to customer

5 Conclusion

This article has laid a foundation by defining what is meant by various terms such as 'software project' and 'management 'to tell you what should you learn and know so that your SPM won't fail .

References

- [1] Software Project Management by Bob Hughes and Mike Cotterell
- [2] From Wikipedia, the free encyclopedia