What is SPM?

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Abstract

In this sample paper, we describe the information about software project management (SPM). Conceptually, SPM involves Project planning and Implementation, and all management can divided into four parts: Project organization and structure management, project planning, project implementation plan and report. Every part has combination with each other. This article could provide you a Comparatively comprehensive knowledge about it, as information would be analyzed and systematized.

keywords: software, project management, project planning

1 Introduction

Software Project Management (SPM) is a subdiscipline of project management in which software projects are planned, monitored and controlled. And SPM can be understood by unscramble project, management and project management separately, since SPM is contained by management.

- What is a Project?
- What is Project Management?
- What is Software Project Management?
- What is project planning?

What is a Project: It is a temporary endeavor (having specific start and completion dates) undertaken to create a unique product or service. Projects may involve a single person or thousands. Projects may be completed in hours, several months or years. For examples: Developing a new product or service, Designing a

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new vehicle, Constructing a building, Running a campaign for political office, Implementing a new business procedure or process and so on.

What is Project Management: It is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives. There are some famous professional organizations of it, such as Project Management Institute (PMI) (pmi.org), Software Engineering Institute (SEI) and IEEE Software Engineering Group. And some Certifications, one of them is PMI's PMP (Project Management Professional). MS Project and Primavera Project Manager are good tools for project management. And there are project management skills that a good manager should have. They are leadership, communications, problem solving, negotiating, influencing the organization, mentoring and process and technical expertise. Besides, project management can be refined into more occupations, like project administrator/coordinator, assistant project manager, project manager/program manager, executive program manager and V.P. program development. PMI has suggested 9 Knowledge Areas:

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management

What is software project management: Software Project Management (SPM) is a sub-discipline of project management in which software projects are

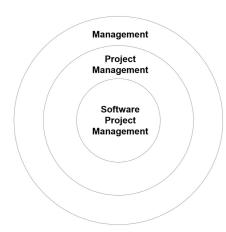


Figure 1: the relationshop between project management and software project management

planned, monitored and controlled. It is inside the project management.

2 Related Work

Software project management is the art and science of planning and leading software projects. It is a subdiscipline of project management in which software projects are planned, implemented, monitored and controlled.

https://en.wikipedia.org/wiki/Software_project_management

Project is defined as Temporary effort to provide special goods, service and achievement. Project Management is to combine every knowledge, skills and tools which is needed into the project to achieve the goal of project. The process of it start from enablement, planning, implementmonitoring and end.

we can summarize the key characteristics that distinguish projects as follow, (e.g., [2]

- 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.

3 Overview

The essence of software project management is behavioral processor Running a process network. It need more than just skills but the gift of comprehensive and coordinated. 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. That's why it's so important.

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
- 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 gives a brief explanation to the Software Project Management (SPM). And it includes professional knowledge which is accepted by professional organizations. what it express can provide a high-level view of SPM and prove the importance of it.

Acknowledgements

I would like to thank my classmates for helping me find the website of shareLatex and borrow me Software Project Management Theory and Case Analysis.

References

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