

# What is SPM

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Software Project Management

## Abstract

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

## 1 Introduction

- 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

## 2 Related Work

### Project Management

- It is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives.
- Following are related to Project Management Professional Organizations
  - Project Management Institute (PMI) (pmi.org)
  - Software Engineering Institute (SEI)
  - IEEE Software Engineering Group
- Certifications
  - PMI's PMP (Project Management Professional)
  - The "PMBOK" – PMI Body of Knowledge
  - Tools
- MS Project
- Primavera Project Manager

### Project Management Skills

- Leadership
- Communications
- Problem Solving
- Negotiating
- Influencing the Organization
- Mentoring
- Process and technical expertise
- Project Manager Positions
  - Project Administrator / Coordinator
  - Assistant Project Manager
  - Project Manager / Program Manager
  - Executive Program Manager
  - V.P. Program Development

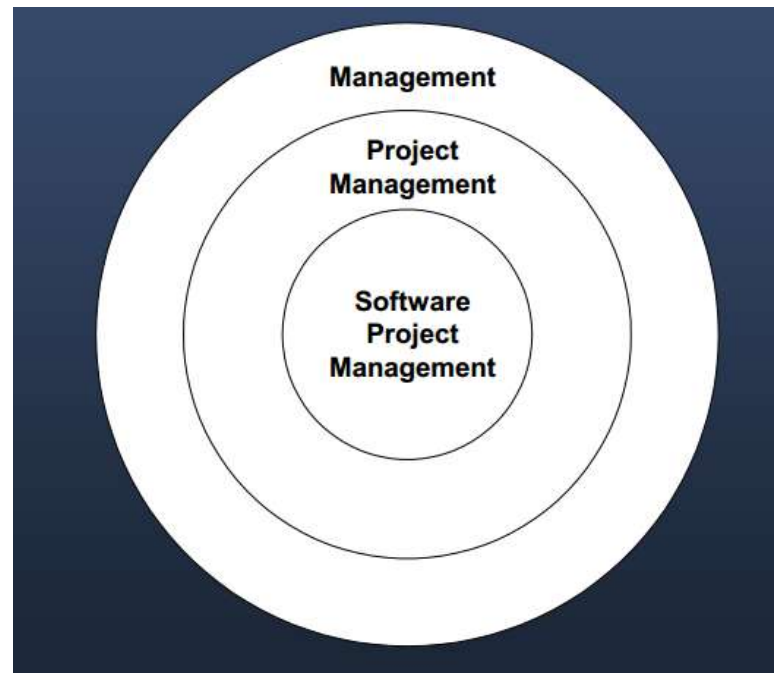
## 3 Overview

- Software Project Management is details relevant to Software Project Management, a sub-discipline of project management in which software projects are planned, monitored and controlled, It is important in Project Planning and Project Monitoring and Control

## 4 Methods/Techniques

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



## 5 Conclusion

- Overview of what Software Project Management is
- Later, we'll see why projects fail
  - Lack of planning, poor management, timemanagement, unclear goals, lack of testing.

## 6 exchanges and cooperation

- In a mature organization, there is an organization-wide ability to manage maintenance and development. Managers can accurately communicate the software process and work activities to staff because of the planned process. The processes actually model the ways in which work is actually done within the organization and are updated when necessary. Roles and responsibilities are clear within the project and across the organization. Schedules and budgets are based on realistic historical performance. Expected results are usually achieved for cost, quality and functionality. Quality is monitored as well as the processes that produce it. Generally, the process is consistently followed and there is a buy-in by all of the participants due to an understanding of the benefits of compliance.[1]
- Immature organizations have ad-hoc software processes that are created on-the-fly by developers and project managers. If there is an organization-wide software process plan, it is not followed or enforced. The organization takes a reactionary approach to development[1]

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## References

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