

# Software Project Management

Author name LiQiXiang

Zhejiang normal university

Software Project Management

## Abstract

Keywords :software project CMM mature

### Introduction

In a mature organization, there is an organization-wide ability to manage maintenance and development. The process actually model the ways in which is actually done within the organization and are update 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 achieve for cost ,quality and functionality.Quality is monitored as well as the process that produce it .Generally the process is consistently followed and there is a buy-in buy all of participants due to an understanding of the benefits of compliance.

History of Software Project Management

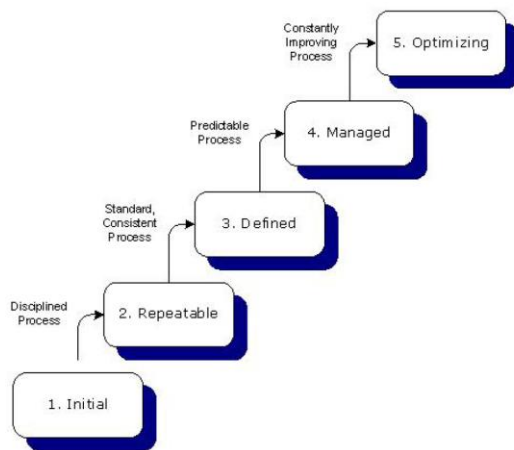
After several decade of miss deadlines , overrun budgets and

sub-par quality products Software developers realized that mismanagement of the software process was their Primary shortfall.This realization started the research initiative that led to the CMM (Capability Maturity Model for software) .In late 1986 , the software Engineer Institute and Mire Cororation( a company name) began development of a process ma-turity framework that would enable software process improvement by developers.

### Overview

Since the CMM focus on the ideas of mature organizations versus immature organizations it would behoove the reader to have an understanding of what is meant by mature and immature .So , in SPM ,we should do more make it mature.

Method/techniques



### Level 1: Initial

Level 1 organizations do not have a stable environment for development and maintenance of software. There is usually difficulty making commitments that the staff can meet with an orderly engineering process.

### Level 2 :Repeatable

Software requirements and the products developed to satisfy them are

Baseline and their integrity is controlled. Project standards are defined and the organization ensures that they are faithfully followed.

### Level 3: Defined

Maintaining software across the organization is documented, including both software engineering and management processes.

### Level 4: Managed

At the Managed level, an organization sets quantitative quality goals for both products and process and refines process with well-defined and consistent measurements.

### Level 5: Optimizing

At the optimizing level, the entire organization is focused on continuous process improvement.

### Conclusion

Why do software projects fail?

People begin programming before they understand the problem.

The team has an unrealistic idea about how much work is involved. Defects are injected early but discovered late.

Programmers have poor habits and they don't feel accountable for their work.

How can we make sure that our projects succeed?

Make sure all decisions are based on openly shared information.

Don't second-guess your team members' expertise.

Introduce software quality from the very beginning of the project.

Don't impose an artificial hierarchy on the project team.

Remember that the fastest way through the project is to use good engineering practices.