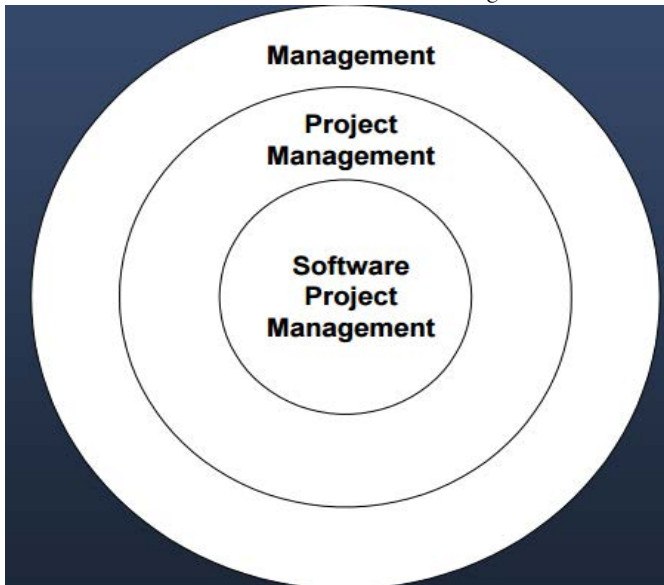# what is SPM

吴海涛 13211136

Zhejiang Normal University
Software Project Management

definition

The object of project management software is a software engineering project. It covers the entire process of software engineering. For the success of the software project development, the key problem is to work on software project scope, may risk, need resources (people, hardware / software), to achieve the task, experienced a milestone, spend effort (cost), schedule, accomplish know fairly well. This management should begin before the technology work began, continue in the software process from concept to implementation, when the software engineering process at the end to end.

Software project management is to enable software projects can be completed smoothly according to predetermined cost, schedule, quality, analysis and management of the activities of staff , product , process and project .

The fundamental purpose of software project management is to make software project especially large projects of the whole software life cycle from analysis, design, coding and testing, maintenance process) under the control of managers to predetermined cost on schedule, according to the quality of the completed software delivery for the user. The research of software project management in order to general principles, guiding the future development of the methods are summarized from the success or failure of the case, while avoiding the mistakes of.

Project Planning

▷Its purpose is to identify the
· scope of the project,
· estimate the work involved,
· and create a project schedule.
▷Project planning begins with that define the software to be developed.
▷The project plan is then developed to describe the tasks that will lead to completion

Project Monitoring and Control

▷The purpose
· To keep the team and management up to date on the project's progress.
· If the project deviates from the plan, then the project manager can take action to correct the problem.
▷Project monitoring and control involves status meetings to gather status from the team. When changes need to be made, change control is used to keep the products up to date.

Why do software projects fail?

▷People begin programming before they understand the problem
· Everyone likes to feel that they're making progress
· When the team starts to code as soon as the project begins, they see immediate gains
· When problems become more complex (as they always do!), the work gets bogged down
· In the best case, a team that begins programming too soon will end up writing good software that solves the wrong problem
▷The team has an unrealistic idea about how much work is involved.
· From far away, most complex problems seem simple to solve
· Teams can commit to impossible deadlines by being overly optimistic and not thinking through the work
· Few people realize the deadline is optimistic until it's blown
▷Defects are injected early but discovered late.
· Projects can address the wrong needs
· Requirements can specify incorrect behavior
· Design, architecture and code can be technically flawed
· Test plans can miss functionality
· The later these problems are found, the more likely they are to cause the project to fail
▷Programmers have poor habits – and they don't feel accountable for their work.
· Programmers don't have good control of their source code
· Code written by one person is often difficult for another person to understand
· Programmers don't test their code, which makes diagnosing and fixing bugs more expensive
· The team does not have a good sense of the overall health of the project.
▷Managers try to test quality into the software.
· Everyone assumes that the testers will catch all of the defects that were injected throughout the project.
· When testers look for defects, managers tell them they are wasting time.
· When testers find defects, programmers are antagonized because they feel that they are being personally criticized.
· When testers miss defects, everyone blames them for not being perfect.

why we need Software Project Management

No project management, project is likely to succeed. But there is no management of the project, it is difficult to ensure the profitability of the project, for the company, the greater the risk of loss. So we must have project management, to the Surety Company in the overall profit, pay special attention to not every project profitability. In addition, project management, to improve the management of the foundation, whether at the beginning of the project management is how bad, as long as the management, the possibility of improving, as can can not be improved, as well as the improvement of speed or quality depends on two factors: one is, especially managers at all levels; another is of interest. The key is "interest", precisely "interests", in the premise of clear, people can play a role fully. It is necessary to point out that the "interest" is diverse, here not only refers to the specific form of multiple interests, but also refers to the interest of the audience is diverse, including the relevant personnel customer personal interests.