

Software Project Management

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What is SPM

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, monitored and controlled. It involves the scope covers the whole process of software engineering. In order to make the software project throughout the software life cycle can be under the control of managers, at the scheduled cost, on schedule and qualified to complete the software delivery users. From an existing success or failure cases is summarized to guide future development of general principles, methods, and to avoid the previous mistakes.

Introduction

What is software? 2

It is a collection of computer programs and related data that provide the instructions telling a computer what to do and how to do it.

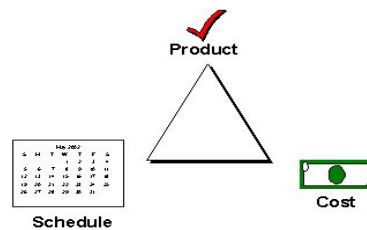
What is project?

A project in business and science is a collaborative enterprise, frequently involving research or design, that is carefully planned to achieve a particular aim.

What is project management? 3

Project management is the discipline of planning, organizing, securing and managing resources to bring about the

successful completion of specific project goals and objectives. Project management has four dimensions: People, Product, Process, Technologies.



Project Management Skills includes

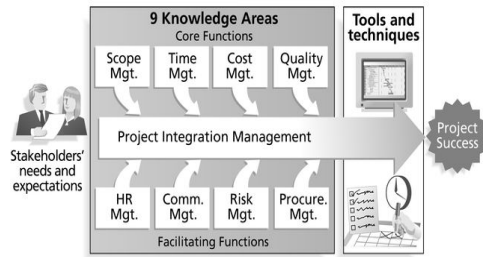
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- Leadership
- Communications
- Problem Solving
- Negotiating
- Influencing the Organization
- Mentoring
- Process and technical expertise

PM has suggested 9 Knowledge

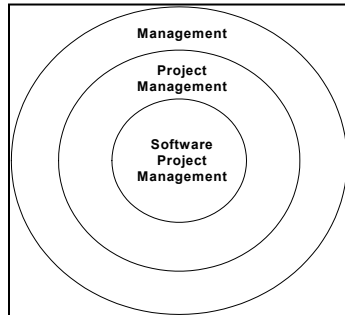
Areas: 4

- 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



- HR & Resource Allocation
- Project Communication
- Procurement Management
- Selection Of Appropriate Software Project Approach
- Project Termination
- Using Tools

Software Project Management 4



It is a sub-discipline of project management in which software projects are planned, monitored and controlled.

Why is software project management important? 4

SPM was proposed in 1970s. DOD(Department of Defense) of USA have been a research to find the reasons of software failure. The result showed that 70% failure projects were due to the poor management rather than technology problems. Good project management cannot guarantee success, but poor management on significant projects always leads to failure.

Topics of SPM:

- The Software Project Environment
- Program Management
- Project Effort Estimate
- Cost Benefit Analysis
- Scope Management
- Activities & Time Planning
- Cost Management
- Risk Management
- Software Quality Management

Activities covered by SPM: The feasibility study, Planning, Project execution, Requirements analysis.

References:

1. Courses' PPT
2. <http://en.wikipedia.org/wiki/Software>
3. [http://en.wikipedia.org/wiki/Project Management](http://en.wikipedia.org/wiki/Project_Management)
4. BOB HUGHES AND MIKE COTTERELL. *Software Project Management. Second Edition*. ISBN 007 709505 7