

# Software Project Management

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Project Management is probably the most critical role through out a Software Project. Mostly because a vast amount of coordination has to be accomplished between many competencies such as Client Services, Strategy, Design, Programming, Engineering, and QA. Approximately 75% of all project failures are due to poor project management in Software Development. A crystal clear understanding of project management is required for any company before it embarks on any type of Software Endeavor

Project management is the application of knowledge, skills, tools and techniques to a broad range of activities in order to meet the requirements of the particular project. A project is a temporary endeavor undertaken to achieve a particular aim. Project management knowledge and practices are best described in terms of their component processes. These processes can be placed into five Process Groups: Initiating, Planning, Executing, Controlling and Closing. &ndash; and nine Knowledge Areas &ndash; 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, and Project Procurement Management.

Source: <http://www.pmi.org/projectmanagement/project.htm>

Project management is a methodical approach to planning and guiding project processes from start to finish. According to the Project Management Institute, the processes are guided through five stages: initiation, planning, executing, controlling, and closing. Project management can be applied to almost any type of project and is widely used to control the complex processes of software development projects.

## Project Manager

Project Management is a critical role within a project that acts as the &lsquo;glue&rsquo; in bringing different competencies together and coordinating the flow of information between them. The Project Manager must be able to play several functions including an advisor, a planner, a manager, and effective communicators, a technologist, a politician, and a businessperson.

## Project Management Process

1. Initiation Process
2. Planning process
3. Execution Process
4. Monitoring and Control Process
5. Closing Process

## Project Management Knowledge Areas

1. Project Integration Management:
2. Project Scope Management
3. Project Time Management
4. Project Cost Management
5. Project Quality Management
6. Project Human Resource Management
7. Project Communication Management
8. Project Risk Management
9. Project Procurement Management

## Software Project Methodologies

1. Rational Unified Process
2. Waterfall Methodologies
3. Spiral Methodologies

## Essential Management Knowledge Area for Project Managers

1. Project Economy
2. Project Lifecycle Phases
3. Project Organization

4. Project Estimation
5. Change Management
6. Configuration Management
7. Contract Management
8. Conflict Management
9. Project Check Points

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