SOFTWARE PROJECT MANAGEMENT FOR BEGINNERS

Mrs. R. Mamatha

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Software Project Management for Beginners

Mrs. R. Mamatha,
Assistant Professor, Department of CSE,
G. Narayanamma Institute of Technology and Science (for Women), Shaikpet, Hyderabad.

PREFACE

Software project management is a discipline that focuses on planning, organizing, and controlling the resources and activities required to develop and deliver software projects successfully. It involves managing a team of software developers, coordinating tasks, and ensuring the project meets its goals within the allocated time, budget, and quality constraints.
The first step in software project management is project initiation, which involves identifying the project objectives, scope, stakeholders, and constraints. This phase includes gathering requirements, analyzing feasibility, and defining the overall project plan. Planning is crucial for a software project's success. It involves creating a detailed roadmap that outlines the project's tasks, timelines, resources, and deliverables. A project manager must define the project scope, break it down into manageable work packages, estimate effort and duration, allocate resources, and create a schedule. Identifying and managing risks is an essential part of software project management. Risk management involves identifying potential risks, analyzing their impact and probability, and developing strategies to mitigate or respond to them. This ensures that risks are addressed proactively, minimizing their impact on the project. A project manager is responsible for forming and leading a cohesive team. This involves assigning tasks, providing guidance and support, fostering collaboration, and ensuring effective communication within the team. Building a positive team culture and managing conflicts is crucial for maintaining team motivation and productivity. During project execution, monitoring and control processes are essential to track progress, identify deviations from the plan, and take corrective actions. Regular status updates, progress reports, and performance metrics help in evaluating the project's health and making necessary adjustments to ensure its success. Software projects often face changes in requirements, scope, or priorities. Change management involves assessing change requests, evaluating their impact on the project, and making informed decisions about accepting or rejecting them. Effective change management ensures that project changes are properly evaluated and controlled to minimize disruptions. Delivering high-quality software is crucial for project success. Quality management involves defining and implementing quality standards, conducting regular inspections and testing, and ensuring that the delivered product meets the specified requirements. Continuous quality improvement processes should be in place to address defects and optimize the final product. Once the project goals are achieved, project closure activities take place. This includes documenting lessons learned, conducting a post-project review, and formally closing the project. It is essential to evaluate the project's success, identify areas for improvement, and celebrate the team's achievements.

Remember that software project management is a complex discipline that requires a combination of technical knowledge, leadership skills, and effective communication. As a beginner, it is important to familiarize yourself with these concepts and practices, and continuously learn and adapt as you gain experience in managing software projects.

TABLE OF CONTENTS

S.No	Topic	Page No.
1	**Chapter-1 Introduction**	7
1.1	What is a project?	7
1.1.1	Project Definition	7
1.2	Project Attributes	8
1.3	Project Constraints	9
1.3.1	Time	9
1.3.2	Cost	10
1.3.3	Scope	10
1.4	What is Project Management	11
1.4.1	Features of projects	12
1.4.2	Project Classification	12
1.4.3	Project Management Tools and techniques	13
1.4.4	Project Success Factors	14
1.5	The Role of Project Manager	14
1.5.1	Responsibilities of a Project Manager.	15
1.6	Project Life Cycle	16
1.6.1	Project Initiation	16
1.6.2	Planning & Design	17
1.6.3	Execution & Controlling Closure	18
2	**Chapter-2 Technology Context**	20
2.1	A systems view of project management.	20
2.1.1	The Three Sphere model for Systems management	21
2.1.2	A Case	23
2.2	Understanding Organisations	24
2.2.1	The key roles	25
2.2.1.1	Top management	25
2.2.1.2	The Project Board	26
2.2.1.3	Project Manager	27
2.3	Stakeholder Management	27
2.3.1	Stakeholder Agreements	28
2.4	The Context of Information Technology Projects	28
2.4.1	Software Projects	28
2.4.2	Software Development Process	29
2.4.3	Requirements Engineering	32
3	**Chapter-3 Project Scheduling**	34

3.1	Developing the Project Schedule	34
3.1.1	Schedule Inputs	35
3.1.2	Scheduling Tools	35
3.2	Project Management Software Tools	36
3.2.1	Allocate Resources to the Tasks	36
3.2.2	Identify Dependencies	37
3.2.3	Create the Schedule	37
3.2.4	RISK PLAN	39
3.3	Developing the Project Budget.	40
3.3.1	Costing	41
3.3.2	Budgeting	42
3.4	Monitoring and Controlling the Project	44
3.4.1	Checkpoints	46
3.4.1.1	Checkpoint design	46
3.4.2	Handling significant deviations from plan	47
3.4.3	Monitoring System Performance	47
3.5	The Project Communication Plan	48
3.5.1	Two Types of Communications Plans for Your Project	48
3.5.2	Building Your Plan	49
3.6	Project Metrics	50
3.6.1	Reasons for Project Metrics	50
3.6.2	Key Project Metrics	51
3.6.3	Developing Project Metrics	52
3.7	Reporting Performance & Progress	52
3.7.1	Project Status Report	53
4	**Chapter-4 The importance of project risk management**	55
4.1	Introduction	55
4.2	The Importance of Project Risk Management	56
4.2.1	Processes and outputs	57
4.3	Risk Management Planning	58
4.4	Common Sources of Risk in Information Technology projects	60
4.4.1	Categories of Risk	61
4.4.2	Risk Breakdown Structure	62
4.5	Risk Identification	63

4.5.1	Suggestions For Identifying Risks	64
4.5.2	The Risk Register	65
4.6	Qualitative Risk Analysis	66
4.6.1	Using Probability/Impact Matrix To Calculate Risk Factors	66
4.6.2	Top Ten Risk Item Tracking	68
4.6.3	Expert Judgment	69
4.7	Quantitative Risk Analysis	70
4.7.1	Decision Trees and Expected monetary Value	70
4.7.2	Simulation	71
4.7.3	Sensitivity Analysis	72
4.8	Risk Response Planning	74
4.9	Risk Monitoring and Control	76
4.10	Using Software to Assist in Project Risk Management	77
4.11	Summary	77
5	**Chapter-5 The importance of project procurement management**	79
5.0	Objectives	79
5.1	Introduction	79
5.2	Planning Purchases and Acquisitions (Procurement Planning)	81
5.2.1	Inputs to Procurement Planning	82
5.2.2	Tools and Techniques for Procurement Planning	83
5.2.3	Outputs from Procurement Planning	86
5.3	Solicitation Planning (Planning Contracting)	87
5.3.1	Tools and Techniques for Solicitation Planning	88
5.3.2	Outputs from Solicitation Planning	88
5.4	Requesting Seller Responses (Solicitation)	89
5.4.1	Inputs to Solicitation	90
5.4.2	Tools and Techniques for Solicitation	90
5.4.3	Outputs from Solicitation	91
5.5	Source Selection (Selecting Sellers)	91
5.5.1	Inputs to Source Selection	92
5.5.2	Tools and Techniques for Source Selection	92
5.5.3	Outputs from Source Selection	93
5.6	Contract Administration	93
5.6.1	Inputs to Contract Administration	94

5.6.2	Suggestions for Change Control in Contracts	94
5.6.3	Tools and Techniques for Contract Administration	95
5.6.4	Outputs from Contract Administration	95
5.7	Contract Close-Out	96
5.7.1	Inputs to Contract Close-out	96
5.7.2	Tools and Techniques for Contract Close-out	96
5.7.3	Outputs from Contract Close-out	96
5.8	Using Software to Assist in Project Procurement	97
5.9	Out Sourcing	97
5.9.1	Benefits of outsourcing	97
5.9	Summary	98
6	**Chapter-6 Change management**	100
6.0	Objectives	100
6.1	Introduction	100
6.2	The Nature of Change	101
6.2.1	The ADKAR Model	101
6.2.2	Change is a process	103
6.2.3	Change can be emotional	1.5
6.3	Change Management Plan	106
6.3.1	Develop a Strategy for Change	109
6.3.2	Implement Change Management Plan and Track progress	112
6.4	Dealing with resistance and Conflict	112
6.4.1	Polarity Management	115
6.5	Summary	117
7	**Chapter-7 Leadership & Ethics in Projects**	118
7.0	Objectives	118
7.1	Introduction	118
7.2	Project Implementation	119
7.2.1	Direct Cutover	119
7.2.2	Parallel	120
7.2.3	Pilot	120
7.2.4	Phased	121
7.3	Administrative Closure	122
7.3.1	Project Sponsor Acceptance	123

7.3.2	The Final Project Report	124
7.3.3	The Final Meeting and Presentation	125
7.3.4	Closing the Project	125
7.4	Project Evaluation	126
7.5	Summary	129