

Project Management Plan Overview

A **Project Management Plan (PMP)** is a comprehensive document that outlines how a project will be executed, monitored, controlled, and closed. It integrates all subsidiary plans from different knowledge areas and serves as a guide for the project team and stakeholders throughout the project lifecycle.

Key Functions of a Project Management Plan:

1. **Integration of Subsidiary Plans:** Each knowledge area has its own detailed plan, which is incorporated into the overall project management plan.
 2. **Communication Tool:** The PMP provides clarity and a baseline for stakeholders, enabling effective communication and expectations management.
 3. **Baseline for Progress Monitoring:** The plan establishes baselines that act as reference points for future comparisons, measuring progress and controlling deviations.
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Common Elements of a Project Management Plan

1. **Introduction/Overview:** Brief description of the project's goals, scope, and objectives.
 2. **Project Organization:** Describes the structure of the project team and the roles and responsibilities of key stakeholders.
 3. **Management and Technical Processes:** Includes project lifecycle and development approach, covering how tasks will be managed and how technical aspects will be addressed.
 4. **Work Scope:** Clearly defines the scope of work to be performed.
 5. **Schedule Information:** Describes the timeline and key milestones.
 6. **Budget Information:** Outlines the financial resources allocated to the project.
 7. **References:** Provides links or attachments to other detailed planning documents (e.g., risk management, quality management).
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Example: Project Management Processes

1. **Management Review Process:**
 - The project steering committee will meet monthly to review progress and provide input.
 - Post-project evaluations will measure if the project meets its goals (e.g., reducing training costs and improving survey results).
2. **Progress Measurement Process:**
 - Project progress is tracked using enterprise project management software, and reviews are conducted during regular meetings.

3. **Change Approval Process:**
 - Changes are managed based on corporate standards (see Attachment 1).
 4. **Supplier Management Process:**
 - Suppliers are evaluated and managed through established procedures (see Attachment 2).
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Example: Technical Processes

1. **Enterprise Project Management Software:**
 - All tasks, resources, and risks are tracked on a weekly basis for real-time information sharing and decision-making.
 2. **Supplier Evaluation:**
 - The project team coordinates with the purchasing department following standard corporate procedures.
 3. **Productivity Improvement:**
 - A system to measure productivity improvements resulting from the project will be implemented, with results tracked annually.
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Project Lifecycle

- **Initiation:** Formalize goals, assess feasibility.
 - **Planning:** Define scope, schedule, and costs.
 - **Execution & Monitoring:** Execute the plan while monitoring goals, costs, and schedules.
 - **Closure:** Collect outputs, ensure objectives are met, and close the project.
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Change Control and Risk Management

1. **Change Control:** Changes are evaluated and approved based on predetermined criteria, ensuring no deviation from agreed project scope without proper authorization.
 2. **Risk Management:** Risks are identified, evaluated, and mitigated to avoid disruption.
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Project Scope Management

- **Defining and Controlling Scope:** Establishes clear boundaries for what is and is not part of the project.

- **Planning Scope Management:** Involves gathering requirements and establishing a scope baseline.
- **Key Documents:**
 - **Requirements Management Plan:** Defines how requirements will be managed throughout the project.
 - **Scope Baseline:** Includes the approved scope statement, Work Breakdown Structure (WBS), and WBS dictionary.

By adhering to these elements, the project management plan ensures alignment across stakeholders, supports project success, and provides a clear path for managing scope, time, cost, quality, and risks effectively.

Collecting Requirements

The **PMBOK® Guide – Seventh Edition** defines a requirement as:

“A condition or capability that is necessary to be present in a product, service, or result to satisfy a business need.”

A **Requirements Management Plan** describes how requirements will be documented, analyzed, and managed throughout the project.

Key Activities in Collecting Requirements:

1. **Input Sources:**
 - Information from prior phases (e.g., business case, project charter).
 - Surveys and existing corporate standards.
 - Stakeholder input.
2. **Tracking Requirements:**
 - Requirements related to specific deliverables (e.g., course prerequisites, facilities) are documented appropriately in the project's planning documents.
 - Tracked through regular reporting processes (e.g., weekly status reports, monthly reviews).
3. **Configuration Management:**
 - Stakeholders analyze, authorize, and report changes to requirements.
 - Changes affecting cost or schedule must be approved by the project steering committee.
4. **Prioritization:**
 - Requirements are categorized as:
 1. Mandatory (1)
 2. Desirable (2)
 3. Nice-to-have (3)

Requirements Traceability

The **Requirements Traceability Matrix (RTM)** helps ensure all project requirements are tracked and addressed.

Example of a Requirements Traceability Matrix:

Requirement No.	Name	Category	Source	Status
R26	Survey questions	Survey	Project steering committee	Complete
R31	Course evaluations	Assessment	Corporate training standards	In process

Defining Scope

Good scope definition improves the accuracy of:

- Time, cost, and resource estimates.
- Performance measurement and project control.

A **Project Scope Statement** includes product characteristics, acceptance criteria, and deliverables. It also explicitly defines **project exclusions**, or what is *out of scope* for the project.

Example Scope Statement: Deliverables

1. **Project Management-Related Deliverables:**
 - Project charter, project management plan, scope statement, Work Breakdown Structure (WBS).
2. **Product-Related Deliverables:**
 - **Supplier Management Training:**
 1. **Needs Assessment:** Conduct a survey to determine learning objectives for various courses, documented in a report and presentation.
 2. **Research:** Identify current training materials and courses, documented in a report.
 3. **Partnerships:** Explore partnerships with external organizations for training development.
 4. **Course Development:** Create interactive course materials (e.g., written, video, DVD, web-based).

5. **Pilot Course:** Provide an introductory pilot course, incorporating feedback into subsequent courses.
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These processes form the foundation for successful project planning, requirement management, and scope definition, ensuring the project meets its objectives while staying within set constraints.

Work Breakdown Structure (WBS)

- **Definition:**
A **Work Breakdown Structure (WBS)** is a hierarchical decomposition of the work to be executed by the project team to achieve project objectives and deliverables.
 - **Purpose:**
 1. Defines work to be performed.
 2. Shows how activities relate to project objectives.
 3. Establishes a framework for defining, assigning, and monitoring work and costs.
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WBS Structure Example:

Level	Element
1.0	Software System
1.1	Main Requirements
1.2	Detailed Requirements
1.3	Mobile Client Development
1.3.1	Architecture
1.3.2	Code
1.3.3	Tests
1.4	Appstore Deployment

WBS Rules of Thumb

1. **100% Rule:**
Ensure all project work is represented. Every deliverable and piece of work is accounted for, and nothing outside the scope is included.

2. **ME Rule (Mutually Exclusive):**

Ensure that work packages are defined without overlaps to avoid duplication and dependencies among work elements.

3. **Quality:**

- **Coherence:** Tasks within a work package should have the same goal.
- **Coupling:** Minimize dependencies between work packages to allow independent work by team members.
- **Continuity:** Maximize efficiency by assigning full-time work packages.
- **Cost:** Work packages should require between one man-week and one man-month of effort.

4. **WBS Dictionary:**

The WBS Dictionary further specifies entries in the WBS, detailing descriptions, associated work, resources, costs, and durations.

WBS Example (MIL-HDBK-881):

WBS Dictionary Entry Example:

- **WBS Item Number:** 3.1.1.1.2
- **WBS Item Name:** Survey administration
- **Requirement Trace:** R12 – Follow corporate policies on surveys
- **Responsible person:** TBD
- **Description:** The survey for supplier management training will determine the learning objectives for courses. It will be administered online, with follow-up measures if the response rate is less than 30% within a week.