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Project Integration Management

1. Develop Project Charter
2. Develop Project Management Plan
3. Direct & Manage Project Work
4. Monitor & Control Project Work
5. Perform Integrated Change Control
6. Close Project or Phase
1. Develop Project Charter

Process of developing a document that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.
Develop Project Charter

- Provides starting point
- Provides boundaries
- Provides a formal record
- Provides a way for senior management to formally accept and commit to a project
- Establishes a partnership between the performing and requesting organization
Contract
Develop Project Charter

Figure 4-2. Develop Project Charter: Inputs, Tools and Techniques, and Outputs
Develop Project Charter: Inputs

• Project statement of work – narrative description of products, services or results
• Business need
• Product scope description – characteristics of product, service, or result
• Strategic plan – organization’s vision, mission, goals, and objectives
Develop Project Charter: Inputs

- Business case – typically cost/benefit analysis
- Agreements – contracts, letter of agreement
- Enterprise environmental factors
- Organizational process assets
Business Case

- Captures the business need
- Explains why the project was selected and how the project supports the organization’s strategic plan
Request Queue

Pipeline Queue

Project Selection Committee

Active Project

Backlog

Rejected

Assign resources: project waiting Kick Off

Submit to Project Management Committee

Project Charter Created

Approved

Delayed

Rejected

Kicked Off

Project Approval Process
Project Selection: Economic Models

$$NPV = \sum_{i=1}^{n} \frac{result_i}{(1 + rate)^i}$$

1. Calculate the NPV of the investment
2. Is the NPV greater than or equal to 0?
   - Yes: Accept the investment
   - No: Reject the investment

See pages 119-123, Rita’s Book
Develop Project Charter: T&T

- Expert judgment
- Facilitation techniques – brainstorming, problem solving, conflict resolution
Develop Project Charter: Output

Project Charter

- Purpose
- High-level requirements
- Assumptions and constraints
- Deliverables
- High-level risks
- Sponsor
- Assigned project manager
- Project Team
- Stakeholders
2. Develop Project Management Plan

![Diagram showing inputs, tools & techniques, and outputs for developing a project management plan.]

**Figure 4-4.** Develop Project Management Plan: Inputs, Tools and Techniques, and Outputs
Develop Project Management Plan

Process of defining, preparing, and coordinating all subsidiary plans and integrating them into a comprehensive project management plan.
Project Management Plan

• Baselines (Scope, Schedule, Cost)
• Subsidiary Plans (one for each Knowledge Area)
• Project Processes
• Requirements Management Plan
• Configuration Management Plan
• Change Management Plan
• Process Improvement Plan
• Lifecycle
Baselines

• What are baselines?

• When are baselines created?

• Where are baselines recorded?

• How do we use baselines?

• When are baselines changed?
Project Management Plan

• May be either summary level or detailed

• Each subsidiary plan is detailed to the extent required by the specific project
3. Direct & Manage Project Work

Process of leading and performing the work defined in the project management plan and implementing approved changes to achieve the project’s objectives.
Direct & Manage Project Work

Figure 4-6. Direct and Manage Project Work: Inputs, Tools and Techniques, and Outputs
Direct & Manage Project Work: Output

- **Deliverables** – unique and verifiable product, result, or capability (typically tangible)
- **Work Performance Data** – the raw observations and measurements (e.g., work completed, actual costs)
- **Change Requests** – formal proposal to modify any document, deliverable, or baseline
Change Requests

- Corrective Action – deals with actual deviations
- Preventive Action – deals with anticipated or possible deviations
- Defect Repair
- Updates – changes to documents, plans, etc.
Change Requests

Corrective and preventive actions do not normally affect the project baselines – only the project performance against the baselines.
4. Monitor & Control Project Work

The process of tracking, reviewing, and reporting the progress to meet the performance objectives defined in the project management plan.
Monitor & Control Project Work

Figure 4-8. Monitor and Control Project Work: Inputs, Tools & Techniques, and Outputs
Monitor & Control Project Work: Inputs

- Schedule Forecasts – derived from progress against the schedule baseline (e.g., schedule variance and schedule performance index)
- Cost Forecasts – derived from progress against the cost baseline and computed estimates to complete (e.g., cost variance, cost performance index)
- Work Performance Information (e.g., status of deliverables, change requests, forecasted estimates)
Monitor & Control Project Work: T&T

- Expert Judgment
- Analytical Techniques – forecast potential outcomes
  - Root cause analysis
  - Reserve analysis
  - Simulations
  - Variance analysis
Monitor & Control Project Work: Output

• Change Requests – expand, adjust, or reduce project scope, product scope, or quality requirements and schedule or cost baselines

• Work Performance Reports (e.g., status reports, notes, recommendations, updates)
5. Perform Integrated Change Control

Process of reviewing all change requests; approving changes and managing changes to deliverables, organizational process assets, project documents, and the project management plan
Perform Integrated Change Control

Figure 4-10. Perform Integrated Change Control: Inputs, Tools & Techniques, and Outputs
Perform Integrated Change Control

- Changes may be requested by any stakeholder
- Approved or rejected by a responsible individual (e.g., sponsor, change control board)
6. Close Project

Process of finalizing all activities across all of the process groups to formally complete the project or phase.
Close Project

Figure 4-12. Close Project or Phase: Inputs, Tools & Techniques, and Outputs

**Inputs**
- .1 Project management plan
- .2 Accepted deliverables
- .3 Organizational process assets

**Tools & Techniques**
- .1 Expert judgment
- .2 Analytical techniques
- .3 Meetings

**Outputs**
- .1 Final product, service, or result transition
- .2 Organizational process assets updates
Next Week