Integration

Processes and activities to identify, define, combine, unify, and coordinate various processes and project management activities within Project Management Process Groups.

1. Develop Project Charter

Developing a document that formally authorizes existence of a project and provides project manager with the authority to apply organizational resources to project activities.

2. Develop Project Management Plan

Defining, preparing, and coordinating all subsidiary plans and integrating them into a comprehensive project management plan. Project's integrated baselines and subsidiary plans may be included within project management plan.

3. Direct and Manage Project Work

Leading and performing work defined in project management plan and implementing approved changes to achieve project's objectives.

4. Monitor and Control Project Work

Tracking, reviewing, and reporting project progress against performance objectives defined in project management plan.

5. Perform Integrated Change Control

Reviewing all change requests; approving changes and managing changes to deliverables, organizational process assets, project documents, and project management plan; and communicating their disposition.

6. Close Project or Phase

Finalizing all activities across all of the Project Management Process Groups to formally complete phase or project.

Scope

Processes required to ensure that project includes all the work required, and only the work required, to complete project successfully.

1. Plan Scope Management

Creating a scope management plan that documents how project scope will be defined, validated, and controlled.

2. Collect Requirements

Determining, documenting, and managing stakeholder needs and requirements to meet project objectives.

3. Define Scope

Developing a detailed description of the project and product.

4. Create WBS

Subdividing project deliverables and project work into smaller, more manageable components.

5. Validate Scope

Formalizing acceptance of completed project deliverables.

6. Control Scope

Monitoring the status of the project and product scope and managing changes to the scope baseline.

Time

Processes required to manage timely completion of the project.

1. Plan Schedule Management

Establishing the policies, procedures, and documentation for planning, developing, managing, executing, and controlling the project schedule.

2. Define Activities

Identifying and documenting specific actions to be performed to produce project deliverables.

3. Sequence Activities

Identifying and documenting relationships among the project activities.

4. Estimate Activity Resources

Estimating type and quantities of material, human resources, equipment, or supplies required to perform each activity.

5. Estimate Activity Durations

Estimating number of work periods needed to complete individual activities with estimated resources.

6. Develop Schedule

Analyzing activity sequences, durations, resource requirements, and schedule constraints to create project schedule model.

7. Control Schedule

Monitoring status of project activities to update project progress and manage changes to schedule baseline to achieve plan.

Cost

Processes involved in planning, estimating, budgeting, financing, funding, managing, and controlling costs so that project can be completed within approved budget.

1. Plan Cost Management

Establishes policies, procedures, and documentation for planning, managing, expending, and controlling project costs.

2. Estimate Costs

Developing an approximation of monetary resources needed to complete project activities.

3. Determine Budget

Aggregating estimated costs of individual activities or work packages to establish an authorized cost baseline.

4. Control Costs

Monitoring status of the project to update project costs and managing changes to cost baseline.

Quality

Processes and activities of performing organization that determine quality policies, objectives, and responsibilities so that project will satisfy needs for which it was undertaken.

1. Plan Quality Management

Identifying quality requirements and/or standards for project and its deliverables and documenting how project will demonstrate compliance with quality requirements.

2. Perform Quality Assurance

Auditing quality requirements and results from quality control measurements to ensure that appropriate quality standards and operational definitions are used.

3. Control Quality

Monitoring and recording results of executing quality activities to assess performance and recommend necessary changes.

Human Resource

Processes that organize, manage, and lead project team.

1. Plan Human Resource Management

Identifying and documenting project roles, responsibilities, required skills, reporting relationships, and creating a staffing management plan.

2. Acquire Project Team

Confirming human resource availability and obtaining team necessary to complete project activities.

3. Develop Project Team

Improving competencies, team member interaction, and overall team environment to enhance project performance.

4. Manage Project Team

Tracking team member performance, providing feedback, resolving issues, and managing changes to optimize project performance.

Communications

Processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and ultimate disposition of project information.

1. Plan Communications Management

Developing an appropriate approach and plan for project communications based on stakeholder's information needs and requirements, and available organizational assets.

2. Manage Communications

Creating, collecting, distributing, storing, retrieving and ultimate disposition of project information in accordance with communications management plan.

3. Control Communications

Monitoring and controlling communications throughout entire project life cycle to ensure information needs of project stakeholders are met.

Risk

Processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project.

1. Plan Risk Management

Defining how to conduct risk management activities for a project.

2. Identify Risks

Determining which risks may affect project and documenting their characteristics.

3. Perform Qualitative Risk Analysis

Prioritizing risks for further analysis or action by assessing and combining their probability of occurrence and impact.

4. Perform Quantitative Risk Analysis

Numerically analyzing effect of identified risks on overall project objectives.

5. Plan Risk Responses

Developing options and actions to enhance opportunities and to reduce threats to project objectives.

6. Control Risks

Implementing risk response plans, tracking identified risks, monitoring residual risks, identifying new risks, and evaluating risk process effectiveness throughout the project.

Procurement

Processes necessary to purchase or acquire products, services, or results needed from outside project team.

1. Plan Procurement Management

Documenting project procurement decisions, specifying approach, and identifying potential sellers.

2. Conduct Procurements

Obtaining seller responses, selecting a seller, and awarding a contract.

3. Control Procurements

Managing procurement relationships, monitoring contract performance, and making changes and corrections as appropriate.

4. Close Procurements

Completing each project procurement.

Stakeholder

Processes required to identify people, groups, or organizations that could impact or be impacted by project, to analyze stakeholder expectations and their impact on project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and execution.

1. Identify Stakeholders

Identifying people, groups, or organizations that could impact or be impacted by a decision, activity, or outcome of project; and analyzing and documenting relevant information regarding their interests, involvement, interdependencies, influence, and potential impact on project success.

2. Plan Stakeholder Management

Developing appropriate management strategies to effectively engage stakeholders throughout project life cycle, based on analysis of their needs, interests, and potential impact on project success.

3. Manage Stakeholder Engagement

Communicating and working with stakeholders to meet their needs/expectations, address issues as they occur, and foster appropriate stakeholder engagement in project activities throughout project life cycle.

4. Control Stakeholder Engagement

Monitoring overall project stakeholder relationships and adjusting strategies and plans for engaging stakeholders.