

PMBOK Process Groups vs. Knowledge Areas

Process Group	Knowledge Area	Process	Definition	Outputs
Initiating	Integration	Develop Project Charter	Process of developing a document that formally authorizes a project and documenting initial requirements that satisfy the stakeholders needs and expectations.	Project Charter
Initiating	Communication	Identify Stakeholders	Process of identifying all people or organizations impacted by the project and documenting relevant information regarding their	Stakeholder Register Stakeholder Management Strategy
Planning	Integration	Develop Project Management Plan	Process of documenting actions necessary to define, prepare, integrate and coordinate all subsidiary plans.	Requirements Documentation Requirements Management Plan Requirements Traceability Matrix
Planning	Scope	Collect Requirements	Process of defining and documenting stakeholders' needs to meet the project objectives.	Requirements Documentation Requirements Management Plan Requirements Traceability Matrix
Planning	Scope	Define Scope	Process of developing a detailed description of the project and product.	Project Scope Statement Project Document Updates
Planning	Scope	Create WBS	Process of subdividing project deliverables and project work into smaller, more manageable components.	Work Breakdown Structure Work Breakdown Structure Dictionary Scope Baseline Project Document Updates
Planning	Time	Define Activities	Process of identifying the specific actions to be performed to produce the project deliverables.	Activity List Activity Attributes Milestone List
Planning	Time	Sequence Activities	Process of identifying and documenting relationships among the project activities.	Project Schedule Network Diagram Project Document Updates
Planning	Time	Estimate Activity Resources	Process of estimating the type and quantities of material, people, equipment, or supplies required to perform each activity.	Activity Resource Requirements Resource Breakdown Structure Project Document Updates
Planning	Time	Estimate Activity Duration	Process of approximating the number of work periods needed to complete individual activities with estimated resources.	Activity Duration Estimates Project Document Updates
Planning	Time	Develop Schedule Time	Process of analyzing activity sequences, durations, resource requirements and schedule constraints to create the project schedule.	Project Schedule Schedule Baseline Schedule Data Project Document Updates
Planning	Cost	Estimate Costs	Process of developing an approximation of the monetary resources needed to complete project activities.	Activity Cost Estimates Basis of Estimates Project Document Updates
Planning	Cost	Determine Budget	Process of aggregating the estimated costs of individual activities or work packages to establish an authorized cost baseline.	Cost Performance Baseline Project Funding Requirements Project Document Updates
Planning	Quality	Plan Quality	Process of identifying quality requirements and/or standards of the project and product and documenting how the project will demonstrate compliance.	Quality Management Plan Quality Metrics Quality Checklists Process Improvement Plan

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				Project Document Updates
Planning	Human Resources	Develop Human Resource Plan	Process of identifying and documenting project roles, responsibilities and required skills, reporting relationships and creating a staffing management plan.	Human Resource Plan
Planning	Communicaiton	Plan Communications	Process of determining project stakeholder information needs and defining a communication approach.	Communications Management Plan Project Document Updates
Planning	Risk	Plan Risk Management	Process of defining how to conduct risk management activities for a project.	Risk Management Plan
Planning	Risk	Identify Risk	Process of determining which risks may affect the project and documenting their characteristics.	Risk Register
Planning	Risk	Perform Qualitative Risk Analysis	Process of prioritizing risks for further analysis or action by assessing and combining their probability of occurrence and impact.	Risk Register Updates
Planning	Risk	Perform Quantitative Risk Analysis	Process of numerically analyzing the effect of identified risks on overall project objectives.	Risk Register Updates
Planning	Risk	Plan Risk Response	Process of developing options and actions to enhance opportunities and to reduce threats to project objectives.	Risk Register Updates Risk Contact Related Decisions Project Management Plan Updates Project Document Updates
Planning	Procurement	Plan Procurement	Process of documenting project purchasing decisions, specifying the approach and identifying potential sellers.	Procurements Management Plan Procurements Statement of Work Make or Buy Decisions Procurement Documents Source Selection Criteria Change Requests
Executing	Integration	Direct and Manage Project Execution	Process of performing the work defined in the project management plan to achieve the project's objectives.	Deliverables Work Performance Information Change Requests Project Management Plan Updates Project Document Updates
Executing	Human Resources	Aquire Project Team	Process of confirming human resource availability and obtaining the necessary team to complete project assignments.	Project Staff Assignments Resource Calendars Project Management Plan Updates
Executing	Quality	Perform Quality Assurance	Process of auditing the quality requirements and the results from quality control measurements to ensure appropriate quality standards are used.	Organization Process Assets Updates Change Requests Project Management Plan Updates Project Document Updates
Executing	Human Resources	Develop Project Team	Process of improving the competencies, team interaction and the overall team environment to enhance project performance.	Team Performance Assesments Enterprise Environmental Factor
Executing	Human Resources	Manage Project Team	Process of tracking team member performance, providing feedback, resolving issues and managing changes to optimize project performance.	Enterprise Environmental Factor Organization Process Assets Updates Change Requests

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Executing	Communication	Distribute Information	Processing of making relevant information available to project stakeholders, as planned.	Organization Process Assets Updates
Executing	Communication	Manage Stakeholder Expectations	Process of communicating and working with stakeholders to meet their needs and addressing issues as they occur.	Organization Process Assets Updates Change Requests Project Management Plan Updates Project Document Updates
Executing	Procurement	Conduct Procurements	Process of obtaining seller responses, selecting a seller and awarding a contract.	Selected Sellers Procurement Contract Award Resource Calendars Change Requests Project Management Plan Updates Project Document Updates
Monitoring and Control	Integration	Monitor and Control Project Work	Process of tracking, reviewing and regulating the progress to meet the performance objectives defined in the project management plan.	Change Requests Project Management Plan Updates Project Document Updates
Monitoring and Control	Integration	Perform Integrated Change Control	Process of reviewing all change requests, approving changes and managing changes to the deliverables, organization process assets, project documents and project management plan.	Change Requests Status Updates Project Management Plan Updates Project Document Updates
Monitoring and Control	Scope	Verify Scope	Process of formalizing acceptance of the completed project deliverables.	Accepted Deliverables Change Requests Project Document Updates
Monitoring and Control	Scope	Control Scope	Process of monitoring the status of the project and product scope and managing changes to the scope baseline.	Work Performance Measurements Organization Process Assets Updates Change Requests Project Management Plan Updates Project Document Updates
Monitoring and Control	Time	Control Schedule	Process of monitoring the status of the project to update project progress and managing changes to the schedule baseline.	Work Performance Measurements Organization Process Assets Updates Change Requests Project Management Plan Updates Project Document Updates
Monitoring and Control	Cost	Control Costs	Process of monitoring the status of the project to update the project budget and managing changes to the cost baseline.	Work Performance Measurements Budget Forecasts Organization Process Assets Updates Change Requests Project Management Plan Updates Project Document Updates
Monitoring and Control	Quality	Perform Quality Control	Process of monitoring and recording results of executing the quality activities to assess performance and recommend necessary changes.	Quality Control Measurements Validated Changes Validated Deliverables

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				Organization Process Assets Updates
				Change Requests
				Project Management Plan Updates
				Project Document Updates
Monitoring and Control	Communication	Report Performance	Process of collecting and distributing performance information including status reports, progress measurements and forecasts.	Performance Reports
				Organization Process Assets Updates
				Change Requests
Monitoring and Control	Risk	Monitor and Control Risk	Process of implementing risk response plans, tracking identified risks, monitoring residual risks, identifying new risks and evaluating risk process effectiveness throughout the project.	Risk Register Updates
				Organization Process Assets Updates
				Change Requests
				Project Management Plan Updates
				Project Document Updates
Monitoring and Control	Procurement	Administer Procurements	Process of managing procurement relationships, monitoring contract performance and making changes/corrections as needed.	Procurement Documents
				Organization Process Assets Updates
				Change Requests
				Project Management Plan Updates
Closing	Integration	Close Project or Phase	Process of finalizing all activities across all of the project management process groups to formally complete the project or phase.	Final Product
				Service or Result Transition
				Organization Process Assets Updates
Closing	Procurement	Close Procurements	Process of completing each project procurement.	Closed Procurements
				Organization Process Assets Updates