



## **PMP® Certification Training**

### Lesson 04: Project Management Processes

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This course is based on the Project Management Institute, *A Guide to the Project Management of Body of Knowledge (PMBOK® Guide)* – Sixth Edition.

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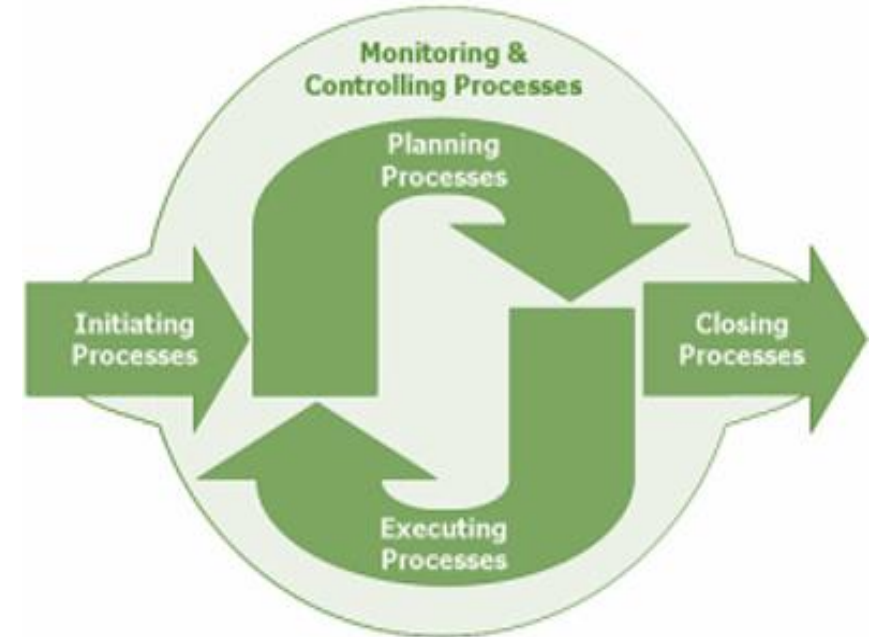
## Objectives

- ▷ Describe Process Group Interactions
- ▷ Recognize the processes aligned with different Process Groups and Knowledge Areas
- ▷ Identify the inputs and actions of Project Management Process Groups

# Project Management Process Groups

Project management processes are divided into five groups:

- Initiating Process Group
- Planning Process Group
- Executing Process Group
- Monitoring and Controlling Process Group
- Closing Process Group



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The iteration of processes within phases is dependent on the complexity of the project and project approach. Simple projects may have only one iteration, while complex projects may have multiple iterations before they enter a new phase.

# Project Management Process Map

Knowledge Areas		Project Integration Management	Project Scope Management	Project Schedule Management	Project Cost Management	Project Quality Management	Project Resource Management	Project Communications Management	Project Risk Management	Project Procurement Management	Project Stakeholder Management
Project Management Process Groups	Initiating	4.1 Develop Project Charter									13.1 Identify Stakeholders
	Planning	4.2 Develop Project Management Plan	5.1 Plan Scope 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS	6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule	7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget	8.1 Plan Quality Management	9.1 Plan Resource Management 9.2 Estimate Activity Resources	10.1 Plan Communications Management	11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Response	12.1 Plan Procurement Management	13.2 Plan Stakeholder Engagement
	Executing	4.3 Direct and Manage Project Work <b>4.4 Manage Project Knowledge</b>				8.2 Manage Quality	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	10.2 Manage Communications	<b>11.6 Implement Risk Response</b>	12.2 Conduct Procurements	13.3 Manage Stakeholder Engagement
	Monitoring and Controlling	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	5.5 Validate Scope 5.6 Control Scope	6.6 Control Schedule	7.4 Control Costs	8.3 Control Quality	<b>9.6 Control Resources</b>	10.3 Monitor Communications	11.7 Monitor Risks	12.3 Control Procurements	13.4 Monitor Stakeholder Engagements
	Closing	4.7 Close Project or Phase									

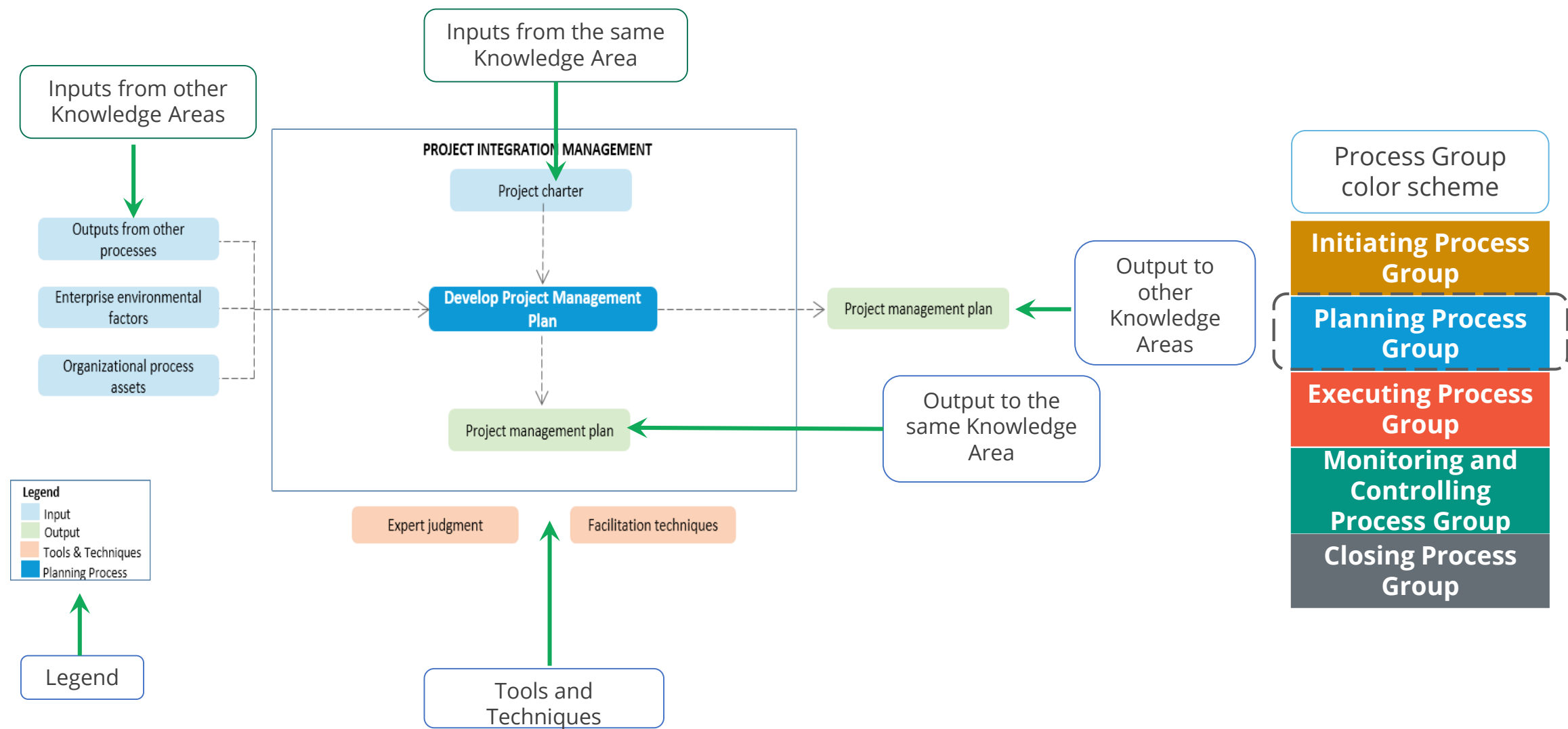
The items in bold are new to PMBOK® Guide – Sixth Edition.

Table 1-4. Project Management Process Group and Knowledge Area Mapping



Study the table to identify processes under project management and the knowledge area they belong to.

# Reading a Process Diagram



# Initiating Process Group

Initiating Process Group defines a new project or phase by establishing its vision and outcomes. The project is officially authorized when the project charter is approved by the sponsor.

## Inputs

- Project statement of work
- Agreements
- Business case
- Enterprise environmental factors
- Organizational process assets
- Procurement documents

## Actions taken

- Perform project assessment with key stakeholders using available and historical data to see the feasibility of new products or services, considering assumptions and constraints.
- Identify key deliverables to achieve the project goals.
- Perform stakeholder analysis to align expectations and gain support for the project.
- Identify high-level risks using current and past data to propose implementation strategy.
- Participate in project charter development to ensure stakeholders' agreement.
- Obtain project charter approval to gain authority and commitment.
- Perform benefit analysis to align organizational strategy and business value
- Facilitate stakeholder communication about the elements of project charter



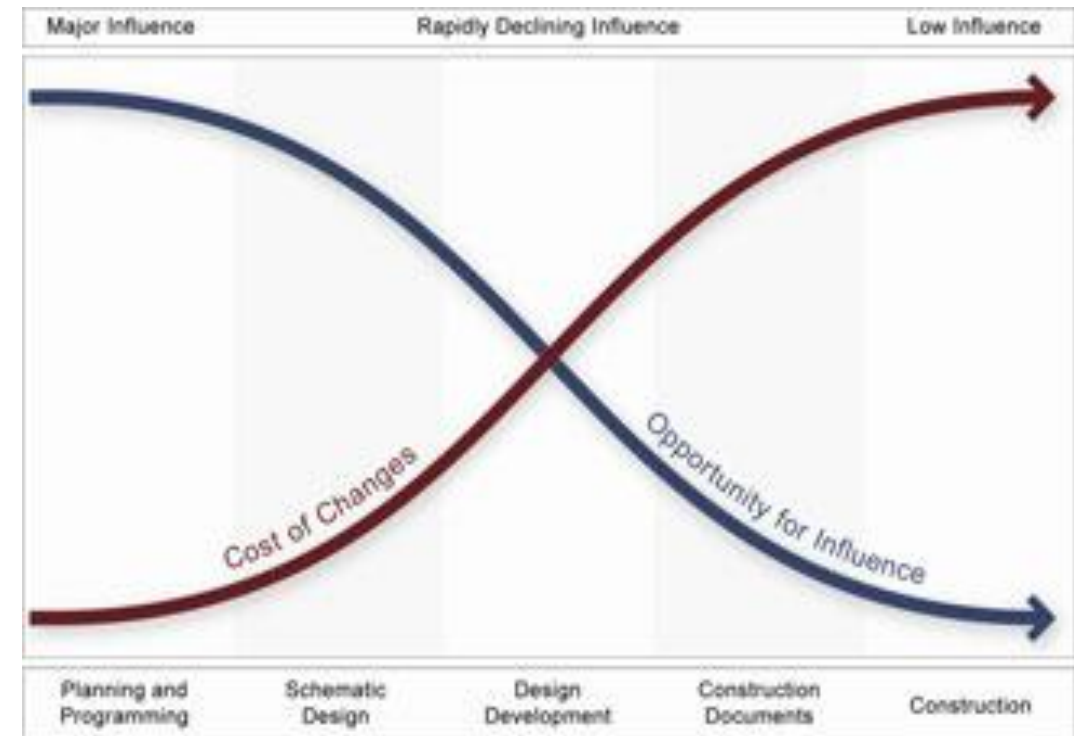
The inputs and activities of initiating process group are important from the exam perspective.

# Project Initiation

The ability of the stakeholders to influence the final characteristics of the project product(s) and final cost of the project is highest at the start, and progressively lowers as the project continues.

A key contributor to this phenomenon is the fact that the cost of changes and error correction generally increases as the project continues.

## Influence vs. Cost





# Planning Process Group

Planning Process Group establishes the total scope of effort, objectives, and course of action required to attain the objectives.

## Inputs

- Project charter
- Requirements given by the customer
- Stakeholder register
- Stakeholder management strategy
- Organizational process assets
- Enterprise environmental factors
- Teaming agreements
- Resource calendars

## Actions taken

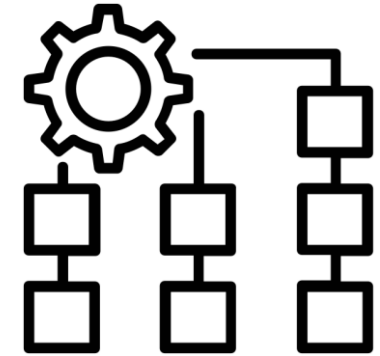
- Refine requirements and convert them into a scope statement and work breakdown structure
- Get stakeholder approval and buy-in
- Develop the baseline scope, cost, and schedule
- Select project team and determine its roles and responsibilities
- Determine project's quality standards and plan
- Prepare a framework for risk management, identification, analysis, and response planning
- Determine what needs to be purchased
- Determine how to execute and control the project
- Document the project management plan
- Handle updates on the plan arising out of change requests



# Project Planning

Project planning serves six primary functions:

- Translating needs into manageable tasks
- Defining required resources
- Organizing and coordinating the Project Team work
- Identifying and evaluating potential risks
- Establishing processes, practices, and procedures for project execution
- Defining the measure(s) of project success



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Repeating the initiation processes at the start of each project phase helps keep the project focused on the need for which it was undertaken. This provides a decision gate at each project phase to help ensure the project is halted if the need no longer exists or if the project is not likely to satisfy the need.

## Executing Process Group

Executing Process Group completes the work defined in the project management plan to satisfy the project specifications.

### Inputs

- Project management plan
- Resource calendars
- Project documents
- Enterprise environmental factors
- Seller proposals
- Approved change requests
- Quality control measurements
- Make-or-buy decisions
- Source selection criteria
- Work performance report
- Work performance information

### Actions taken

- Manage stakeholder engagements
- Deliver the work packages as planned
- Implement quality assurance activities
- Produce project reports
- Remove project bottlenecks
- Organize team building activities
- Organize training for the team members
- Conduct project progress meetings
- Implement approved changes, corrective actions, preventive actions, and defect repair
- Finalize procurement arrangements and contracts

# Monitoring and Controlling Process Group

Monitoring and Controlling Process Group tracks, reviews, and regulates the progress and performance of the project. It identifies and initiates the changes to the plan when required.

## Inputs

- Deliverables
- Work performance data
- Change requests
- Organizational process assets
- Project management plan and documents
- Selected sellers

## Actions taken

- Measure project performance against the baseline
- Determine variances and take appropriate action
- Recommend changes and corrective and preventive actions
- Facilitate conflict resolution
- Identify root causes of problems
- Obtain formal acceptance for deliverables
- Administer contracts with sellers
- Control changes
- Conduct status review meetings

## Closing Process Group

Closing Process Group finalizes the activities across all Project Management Process Groups to formally complete the project, phase, or contractual obligations.

### Inputs

- Project plan and documents
- Accepted project deliverables
- Procurement documentation
- Organizational process assets
- Enterprise environmental factors

### Actions taken

- Confirm that all project requirements are met
- Obtain formal signoff from customer
- Make payment to all parties and update cost records
- Complete contract closure
- Update lessons learned database
- Measure customer satisfaction
- Hand over project deliverables to operations team
- Release resources from the project