



## PMP® Certification Training

### Lesson 04: Project Management Processes

The PMI Registered Education Provider logo is a registered mark of the Project Management Institute, Inc.



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

PMP, PMI, and PMBOK are registered marks of the Project Management Institute, Inc.



## Objectives

- ▷ Describe Process Group interactions
- ▷ Identify the inputs and actions of Project Management Process Groups

# Project Management Process Groups

**Project management processes are divided into five groups:**

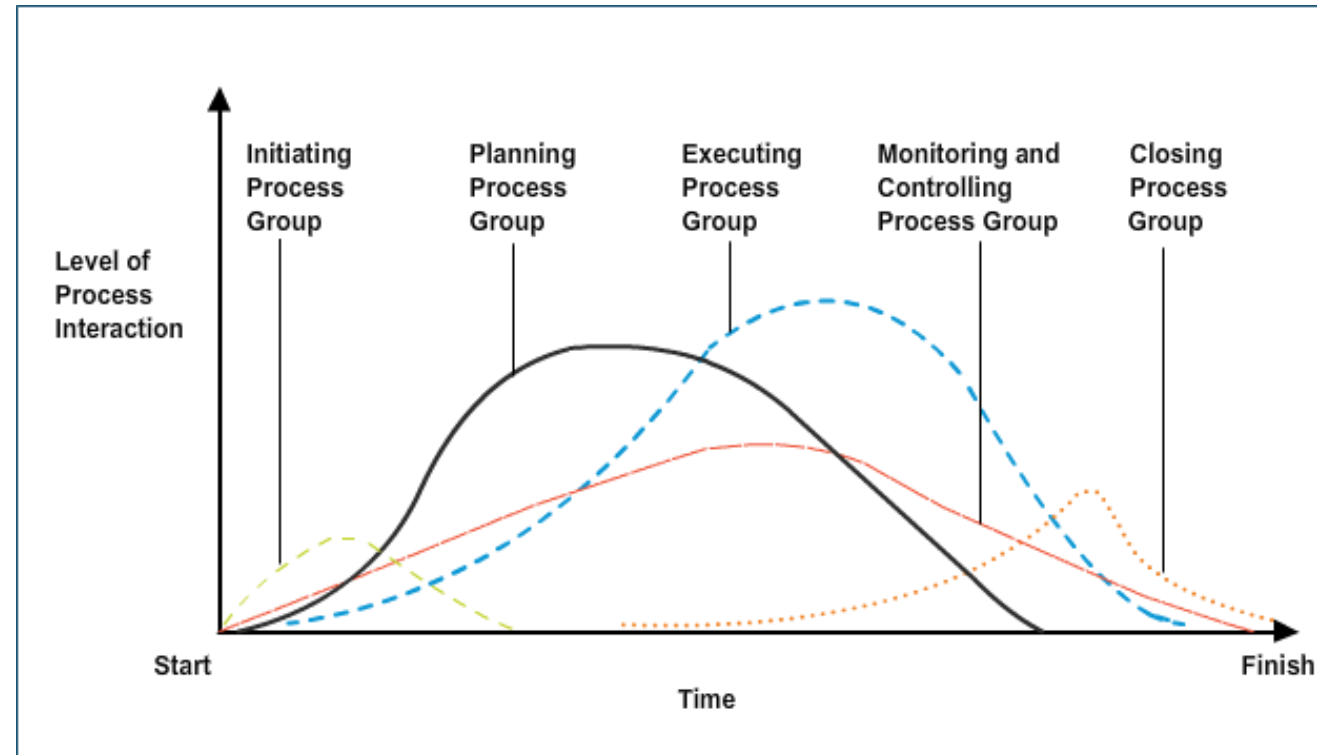
- Initiating Process Group
- Planning Process Group
- Executing Process Group
- Monitoring and Controlling Process Group
- Closing Process Group



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.

# Process Group Interactions

Process Groups have overlapping activities that occur throughout the project life cycle. The output of one process acts as an input to another process or a deliverable of the project.



**Figure 1-5. Process Groups Interact in a Phase or Project**

# 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: High Level

- Business documents
- Agreements
- Project management plan
- Project documents
- Enterprise environmental factors
- Organizational process assets

## 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.

# Planning Process Group

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

## Inputs: High Level

- Project charter
- Outputs from different processes
- Project documents
- Agreements
- Business documents
- Procurement documentation
- Organizational process assets
- Enterprise environmental factors

## Actions taken

- Refine requirements and convert them into a scope statement and work breakdown structure
- Get stakeholder approval and buy-in
- Develop the scope, cost, and schedule baselines
- Select the 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 that arise from change requests

## Executing Process Group

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

### Inputs: High Level

- Project management plan
- Project documents
- Approved change requests
- Team performance assessments
- Work performance reports
- Procurement documentation
- Seller proposals
- Enterprise environmental factors
- Organizational process assets

### Actions taken

- Acquire and manage project resources
- Manage task execution per project management plan by leading and developing project team
- Implement quality management plan to ensure work is performed in line with quality standards
- Implement approved changes, corrective actions, preventive actions, and defect repair
- Implement the risk responses per the plan
- Manage flow of information per communication plan in order to keep stakeholders engaged
- Select sellers and award contract
- Maintain stakeholder relationship to receive support and manage expectations



# 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: High Level

- Project management plan
- Project documents
- Procurement documentation
- Work performance data
- Work performance reports
- Agreements
- Deliverables
- Change requests
- Project funding requirements
- Approved change requests
- Enterprise environmental factors
- Organizational process assets

## Actions taken

- Measure project performance against the baseline to identify and quantify any variances and corrective actions
- Manage changes per change management plan to ensure project goals remain aligned with business needs
- Verify the project deliverables to meet project requirements and business needs
- Monitor and assess risk to evaluate the exposure and risk strategies
- Review issue log and determine corrective action to minimize project impact
- Capture, analyze, and manage lessons learned to enable continuous improvement
- Monitor procurement activities to verify compliance with project objectives



## 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: High Level

- Project charter
- Project management plan
- Project documents
- Accepted deliverables
- Business documents
- Agreements
- Procurement documentation
- Organizational process assets

### Actions taken

- Obtain final acceptance of the project deliverables in order to confirm that project scope and deliverables are achieved
- Transfer ownership of deliverables per the plan
- Obtain financial, legal, and administrative closure in order to communicate formal project closure
- Prepare and share final project report
- Collate lessons learned that are documented throughout the project so that it can be updated in organization's knowledge base
- Archive project documents that can be used for future projects and audits
- Obtain feedback from relevant stakeholders in order to evaluate their satisfaction



## Key Takeaways

- ▷ Initiating Process Group defines a new project or phase. When the project charter is approved, the project is officially authorized.
- ▷ Planning Process Group establishes the total scope of effort, objectives, and course of action required to attain the objectives.
- ▷ Executing Process Group completes the work defined in the project management plan to satisfy the project specifications.
- ▷ 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.
- ▷ Closing Process Group finalizes the activities across all Process Groups to formally complete the project, phase, or contractual obligations.



## Quiz

## Quiz



1. A project manager is validating the scope. Which Process Group is the project manager working in?

- A Planning
- B Monitoring and Controlling
- C Initiating
- D Closing

## Quiz



1. A project manager is validating the scope. Which Process Group is the project manager working in?

- A ▶ Planning
- B ▶ Monitoring and Controlling
- C ▶ Initiating
- D ▶ Closing



The correct answer is: **B**

**The project manager is in Monitoring and Controlling Process Group. Validate scope is part of Monitoring and Controlling Process Group under the knowledge area project scope management.**

## Quiz



2. Which of the following is an output of the Initiating Process Group?

- A ► Project charter
- B ► Organizational process assets
- C ► Enterprise environmental factors
- D ► Business case

## Quiz



2. Which of the following is an output of the Initiating Process Group?

- A ▶ Project charter
- B ▶ Organizational process assets
- C ▶ Enterprise environmental factors
- D ▶ Business case



The correct answer is: **A**

**Project charter is an output of the Initiating Process Group. All other options are inputs to the Initiating Process Group.**



## Quiz



**3. Who is in control of the project during the planning processes?**

- A** ▶ Project manager
- B** ▶ Functional manager
- C** ▶ Team members
- D** ▶ Stakeholders

## Quiz



3. Who is in control of the project during the planning processes?

- A ▶ Project manager
- B ▶ Functional manager
- C ▶ Team members
- D ▶ Stakeholders



The correct answer is: **A**

**The project manager is in control of the project throughout the project life cycle.**

## Quiz



**4. The high-level project schedule constraints have been determined. Which Process Group is the project in?**

- A** ▶ Planning
- B** ▶ Closing
- C** ▶ Monitoring and Controlling
- D** ▶ Initiating

## Quiz



4. The high-level project schedule constraints have been determined. Which Process Group is the project in?

- A Planning
- B Closing
- C Monitoring and Controlling
- D Initiating



The correct answer is: **D**

**The high-level constraints of schedule and budget are determined during the initiating Process Group. The detailed planning is done during the planning Process Group.**

## Quiz



**5. Which of the following Process Groups should be included in all the projects?**

- A** ▶ Initiating, Planning, Executing, Monitoring and Controlling, and Closing
- B** ▶ Planning, Executing, and Monitoring and Controlling
- C** ▶ Monitoring and Controlling
- D** ▶ Initiating, Planning, and Executing

## Quiz



5. Which of the following Process Groups should be included in all the projects?

- A ▶ Initiating, Planning, Executing, Monitoring and Controlling, and Closing
- B ▶ Planning, Executing, and Monitoring and Controlling
- C ▶ Monitoring and Controlling
- D ▶ Initiating, Planning, and Executing



The correct answer is: **A**

**In every project, all five Process Groups must be included, but the level of attention given to each Process Group will be governed by the project manager depending on the project size and complexity.**

## Additional Reading

(Refer to the exercises provided in the PMP Classroom Exercises)



- Exercise 1
- Exercise 2
- Exercise 3



This concludes  
“Project Management  
Processes.”



The next lesson is  
“Role of the Project  
Manager.”

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

PMP, PMI, and PMBOK are registered marks of the Project Management Institute, Inc.