



PMP® Certification Training

Lesson 03: Project Management Framework

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

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Objectives

- ▷ Define a project and distinguish among portfolio, program, and projects
- ▷ Describe stakeholders and identify their role in the project
- ▷ Recognize the roles of project management office
- ▷ Explain the influences on project environment
- ▷ Differentiate between project life cycle and product life cycle
- ▷ Discuss business documents
- ▷ Explain project management process map and framework
- ▷ Describe different organization structures

Introduction to Projects

Let us understand the basics of projects:

What is a project?

Benefits of
project
management

Why do some
projects fail?

Roles in project
management

Definition of Project

According to Project Management Institute (PMI®), a project is a temporary endeavor undertaken to create a unique product, service, or result.

Project Characteristics

- Projects are:
 - Performed by people
 - Constrained by limited resources
 - Executed once and completed
 - Planned and controlled
 - Temporary in nature
- Projects differ from operations. Operations are ongoing and repetitive, while projects are temporary and unique endeavors.
- Projects can contain repetitive elements, but the elements do not change its unique characteristics.

Project Characteristics (Contd.)

- Projects have a definite beginning and end.
- They can have varied durations ranging from very short (less than a month) to very long (more than five years).
- Projects are completed when:
 - The defined objectives are met
 - The goals/objectives cannot be met within budget, time, available resources, or chosen technology
 - The funding is exhausted
 - The need to execute the project has changed or been eliminated (due to competition, regulation, legal, and compliance issues)
 - The legal or contractual issues result in project closure

Examples of a Project

Each of the following is a temporary endeavor undertaken to create a unique product, service, or result.

- Developing a new charger for cell phones
- Expanding the service offering at a consulting firm
- Merging two organizations
- Implementing a new accounting system and the corresponding process changes
- Renovating corporate office space
- Developing research around a political issue
- Performing a study on the environmental impact of a new bridge in a rural area
- Building a new parking garage

Project Drivers

The main motives of projects are:

To drive change

- Transforming business from one state to another
- Strategic shifts
- Organizational growth
- Mergers and acquisition

To enable business value

- New market opportunities
- Response to competition
- Global expansion
- Decreasing profit margins

To meet increasingly complex set of challenges

- Technology changes
- World markets
- Legal and regulatory issues
- Other environmental factors

Reasons for Failure of Projects

Research has identified the following top reasons for project failures:

1. Requirements that are ambiguous, misunderstood, or incorrect
2. Controlling cost and schedule
3. Scope creep
4. Sponsor not actively involved in the project strategy and direction
5. Project plan that is nonexistent, out of date, incomplete, or poorly constructed
6. Frequent changes of assigned PM
7. Project teams (external and in-house resources) whose responsibilities and relationships are not clearly defined in writing
8. No clear definition of the benefits and the deliverables that will produce them
9. Poor or no change control
10. Inappropriate or insufficient skills

Definition of Project Management

PMI® definition of *project management:

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. It is accomplished through the appropriate application and integration of the project management processes identified for the project. It enables organizations to execute projects effectively and efficiently.

Common misconception:

Project management is an art of creating an illusion that any outcome is the result of a series of predetermined, deliberate acts when, in fact, it was dumb luck.

Project Management Methodology

Project management is a formalized approach to manage a unique product, service, or result.

Management methodology defined by Project Management Institute:

Follows <ul style="list-style-type: none">• 5 Process groups• 10 Knowledge areas• 49 Processes	Incorporates <ul style="list-style-type: none">• Standard documentation• Standard process and approaches	Applies across industries <ul style="list-style-type: none">• Oil and gas• Petrochemical• Construction• Information technology• Software development• Telecom	Tailored to meet specific project and organizational needs
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Value of Project Management

- Project management contributes to organizational success
- It helps by completing the project:
 - Within the allotted time
 - Within the budgeted cost
 - At the proper performance or specification level
 - With acceptance by the customer, sponsor, or user
 - With minimally agreed upon scope changes
 - Without disturbing the main work flow of the organization
 - Without changing the corporate culture
- The unique efforts of project management require innovative thinking and planning in advance
- While similar efforts may have taken place in the past, the situational, environmental, legal, regulatory, and technical changes require a unique approach

Portfolios, Programs, Projects

Portfolios, programs, and projects operate together to deliver benefits to the business

Program management is the centralized, coordinated management of a program to achieve the program's strategic objectives and benefits. It involves aligning multiple projects to achieve the program goals and allows for optimized or integrated cost, schedule, and effort.

Projects in a program have a common deliverable or capability. Projects that are interlinked are called a portfolio of projects.

A portfolio may consist of other portfolios, projects, and programs. The components may or may not be interdependent.

Definition of Program Management

PMI® Definition of *Program Management:

The application of knowledge, skills, and principles to a program to achieve the program objectives to obtain benefits and control not available by managing components individually

PMI® Definition of *Program:

A program is defined as a group of related projects, subprograms, and program activities managed in a coordinated way to obtain benefits not available from managing them individually.

Features of Program Management

- For a group of projects to be classified as a program, there must be some value added in managing them together as a program.
- A project need not belong to a program; a program will always have projects.
- A program is designed to deliver some strategic benefits to the organization; the benefits could be tangible (for example, growing the operating margin) or intangible (for example, improving the morale of the team).
- A project manager focuses on fulfilling the requirements of a project, whereas a program manager focuses on delivery of benefits to the organization.

Portfolio

The definition of *portfolio is as follows:

A collection of projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives

- Projects and programs of a portfolio may not be necessarily interdependent or directly related.
- A portfolio can be based on the business objectives.

“Japanese Projects” can be a portfolio where an IT company puts all its projects from Japan to give more focus and attention to its Japanese projects and grow its Japanese business. Similar projects can be managed as a program within this portfolio; all banking projects will be managed as a “banking program.”

*Definition taken from the Glossary of the Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide)* – Sixth Edition, Project Management Institute, Inc., 2017. Page 15

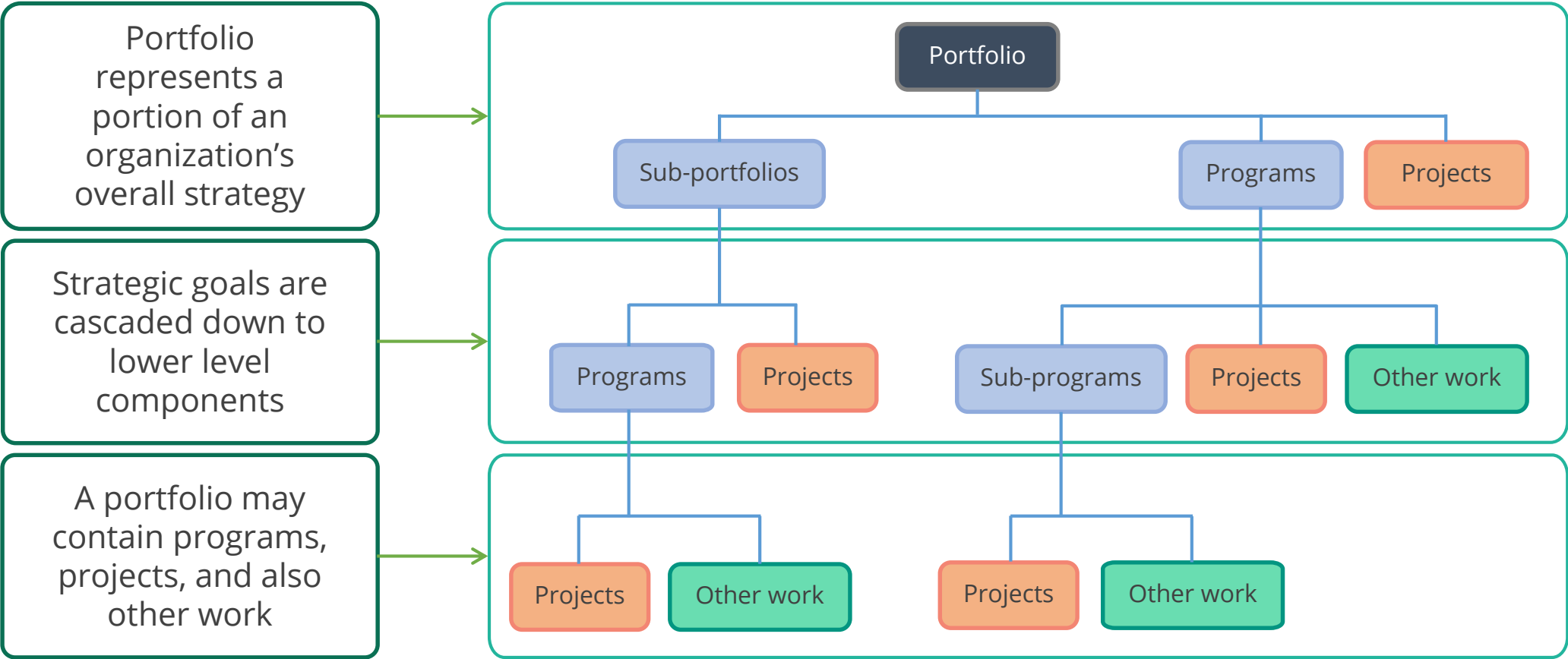
Portfolio Management

The definition of *portfolio management is as follows:

Portfolio management refers to the centralized management of one or more portfolios to achieve strategic objectives.

Portfolio management includes identifying, prioritizing, authorizing, managing, and controlling projects, programs, and other related work to achieve strategic business objectives.

Relationship among Portfolios, Programs, and Projects



Stakeholder

The definition of ***stakeholder** is as follows:

An individual, group, or organization who may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio is known as a stakeholder.

The project team, project manager, project sponsor, PMO office, customer, etc. are the stakeholders of the project.

A project sponsor is the one who gives the go-ahead for a project and provides the necessary resources to execute the project.

Project Management Office

A Project Management Office (PMO) is an organizational structure that standardizes project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques.

The roles of PMO are as follows:

Primary Roles

PMO usually has one or a combination of the following primary roles:

- It provides the policies, methodologies, and tools and templates for managing projects within the organization
- It provides support and training in the organization on how to manage projects
- It provides project managers for ongoing projects in the organization
- It ensures compliance (governance) with all policies, procedures, methodologies, and tools and templates within the organization

Other Roles

PMO may also help in the following areas:

- Managing interdependencies between projects
- Selecting, managing, and deploying shared or dedicated project resources
- Terminating projects
- Organizing “lessons learned” sessions
- Maintaining the project management knowledge base for an organization
- Supporting projects through knowledge repositories, training, and mentoring

Types of Project Management Offices

Types of PMO structures in organizations:

Supportive (Low control)

Controlling (Medium control)

Directive (High control)

Project Life Cycle vs. Product Life Cycle

Project life cycle

- A project life cycle is the series of phases that a project passes through from the beginning to the end.
- A project life cycle depends upon the control needs of the performing organization or the organization's preference, which is defined in the project execution methodology.

Product life cycle

- A typical product life cycle starts with the conception of the product and goes on until its withdrawal from the market or when it becomes obsolete.
- A product life cycle is long.
- A product life cycle includes multiple projects throughout its life.

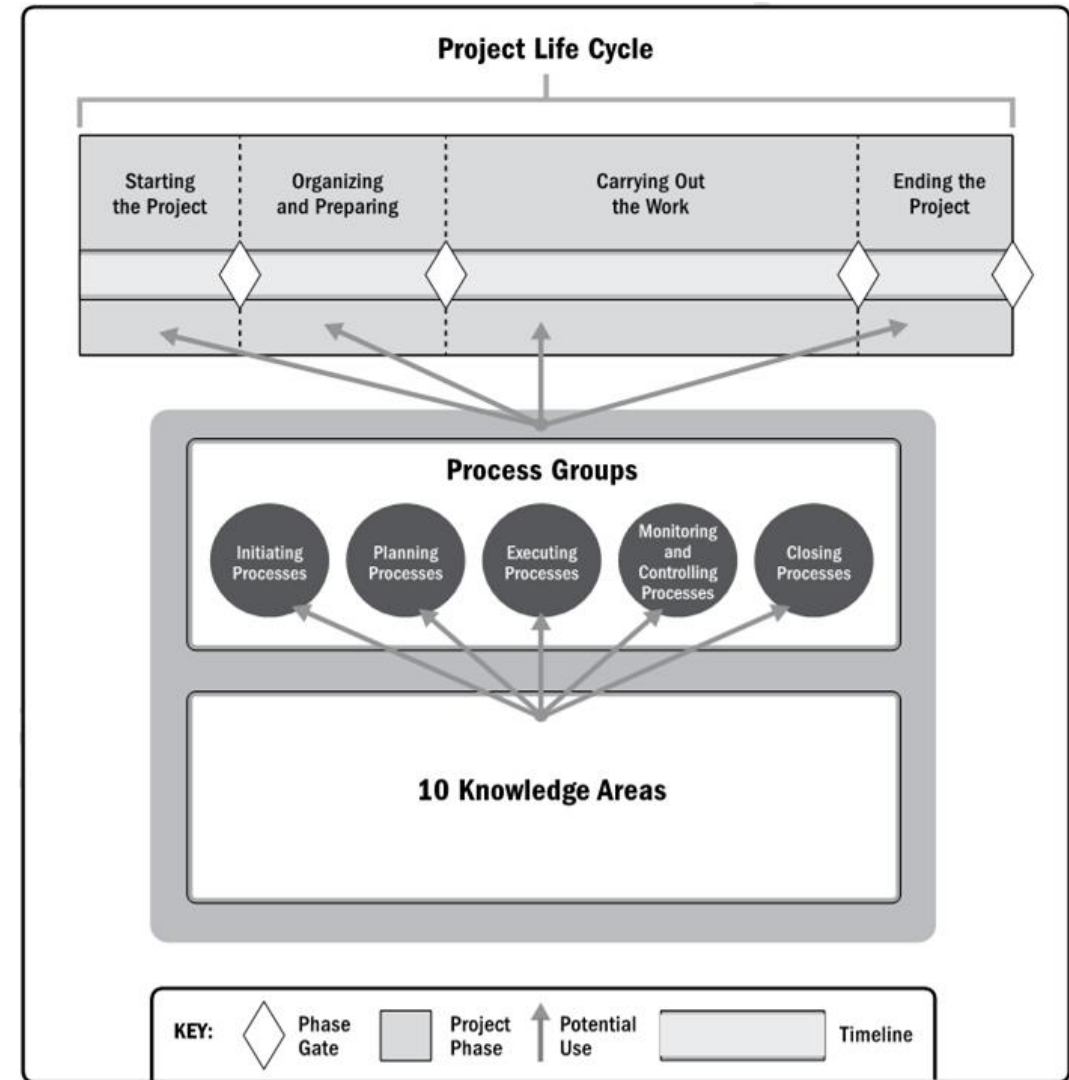
Key Components of Project

Project phases: A collection of logically related project activities that culminates in the completion of one or more deliverables

Phase gate: A review at the end of a phase in which a decision is made to continue to the next phase

Process group: A logical grouping of project management inputs, tools and techniques, and outputs

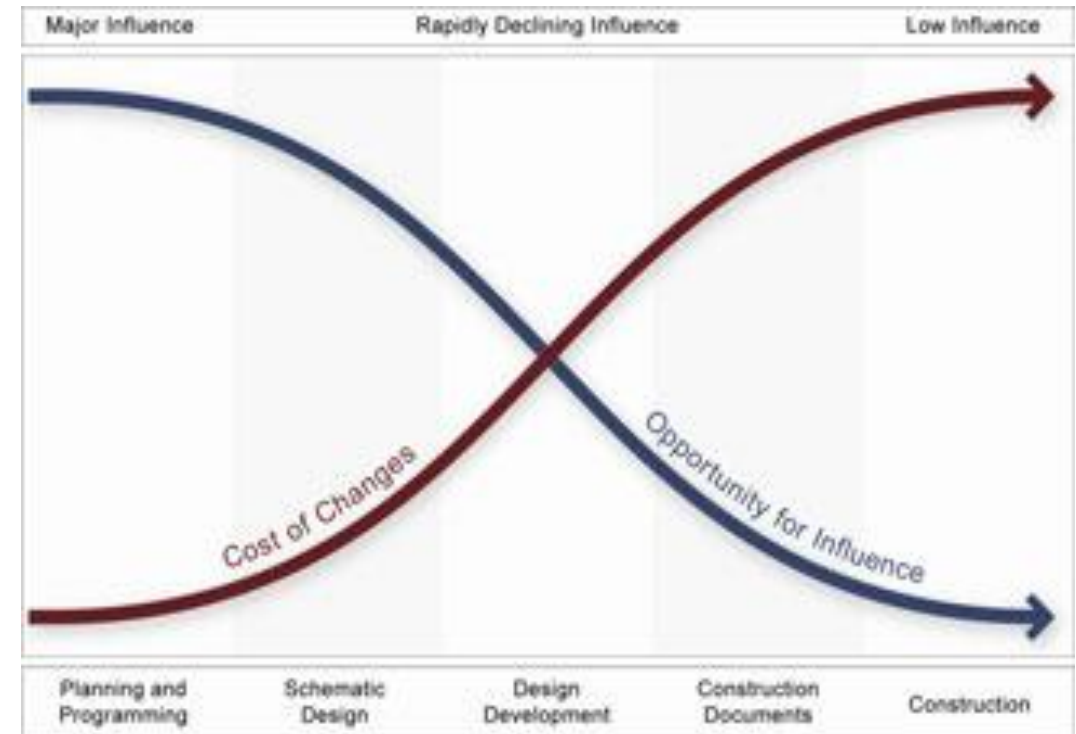
Knowledge area: An identified area of project management defined by its knowledge requirements and described in terms of its processes and practices



Impact of Variables Over Time

- The ability of the stakeholders to influence the final characteristics of the project(s) or 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



Project Life Cycle vs. Product Life Cycle (Contd.)



The Apple iPod is an example of a product. Over the course of its product life there were many projects that enhanced its functionalities and added features. These projects and their life cycles were determined by the control needs of Apple, which typically emphasized time-to-market (TTM) and high quality. The iPod as a product exhibited its own life cycle of “Conception – Introduction – Maturity – Decline – Withdrawal” and new products have replaced it now.



The ability to differentiate between product and project life cycle may be useful while answering the exam.

Types of Development Life Cycle

- **Predictive:** Project scope, time, and cost are determined as early as possible. The changes to project scope are carefully managed. It is also referred to as waterfall life cycle.
- **Iterative:** The scope is determined earlier, but time and cost estimates are regularly modified as the understanding of the product increases.
- **Incremental:** The deliverable is produced through a series of iterations that successively add functionality.
- **Adaptive:** Projects can be agile, iterative, or incremental. The scope is defined and approved before the start of an iteration. It is also referred to as agile or change-driven life cycle. The iterations are very rapid and are fixed in duration and cost.
- **Hybrid:** A hybrid life cycle is a combination of a predictive and an adaptive life cycle.

Stakeholder Management

A key responsibility of a project manager is to manage stakeholders. Project manager has to take up specific activities for stakeholder management.

Identifying internal and external stakeholders

Identifying stakeholders at the beginning is essential. A stakeholder, who is identified toward the end of the project, may come up with a new requirement at that stage, and incorporating it can be risky.

Determining stakeholder requirements

Stakeholder requirements need to be clearly identified. It is the job of the project manager to get them right by doing a proper stakeholder requirement analysis.

Determining stakeholder expectations

Unstated stakeholders' expectations need to be clarified to see if it needs to be a project requirement.

Communicating with stakeholders

The project manager, as part of stakeholder analysis, should focus on communicating with them regularly to keep stakeholders involved in the project.



Understand the practices of stakeholder management to answer scenario-based questions.

Project Management Process

Process Groups

Initiating Process Group

- Establishes the vision of what the project will accomplish
- Defines and authorizes the project or a project phase

Planning Process Group

- Establishes the total scope of the project
- Defines and refines objectives and plans the course of action required to attain the objectives and scope for which the project was undertaken

Executing Process Group

- Integrates and coordinates people and other resources to carry out the project plan and deliver the agreed to scope of the project

Monitoring and Controlling Process Group

- Monitors and measures progress regularly in order to identify variances from the plan so appropriate corrective actions can be taken when necessary

Closing Process Group

- Formalizes acceptance of the product, service or result and brings the project or a project phase to an orderly end

Project management Data and Information

The Project life cycle flow shows the order of events that occur during a project's duration.

During the project, data is collected and analyzed to assist in project decision making.

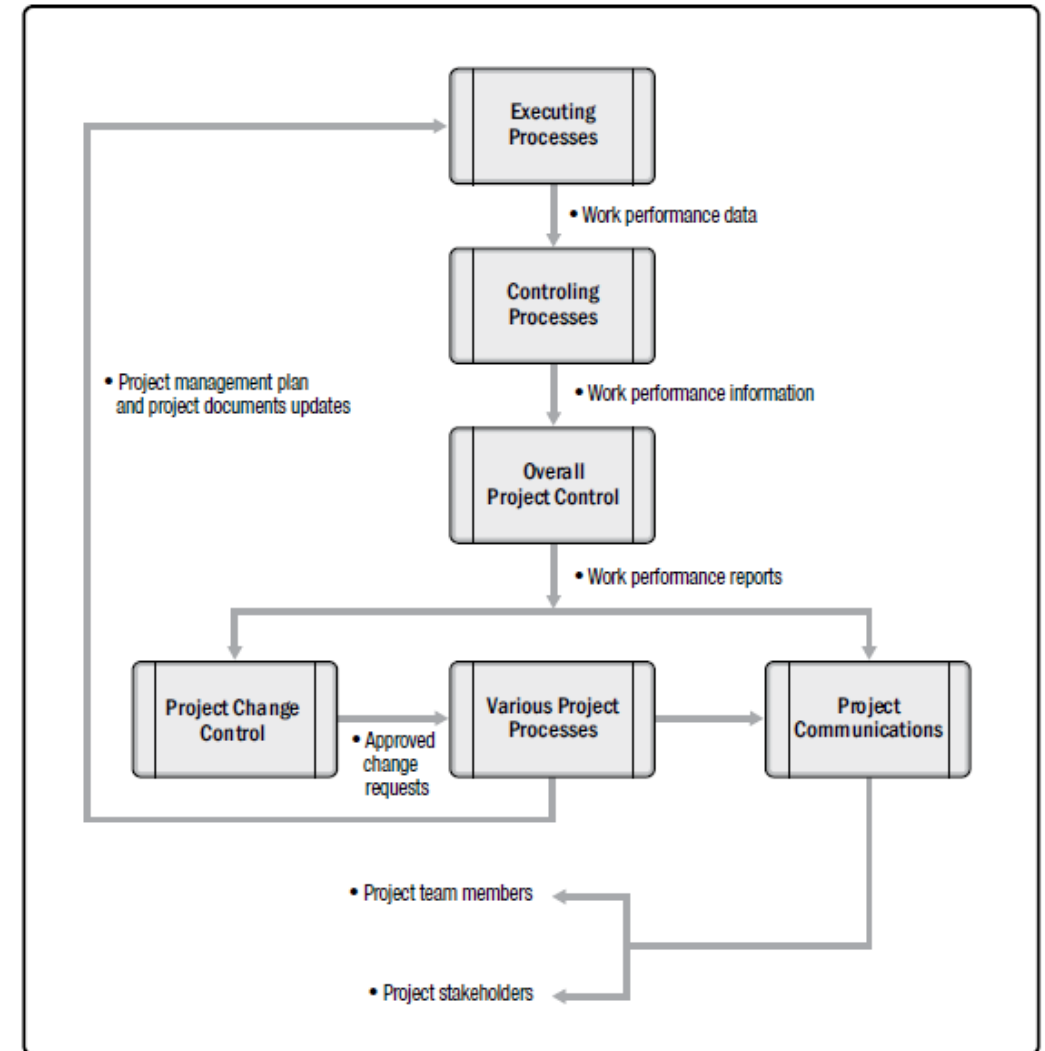


Figure 1-7. Project Data, Information, and Report Flow

Project Flow: Key Terms

The following are the key PMI® terms related to project data and information.

Work Performance Data

- The raw observations and measurements identified during project activities.

Work Performance Information

- Data collected from various controlling processes analyzed in context.

Work Performance Reports

- The physical or electronic representation of work performance information such as status reports, electronic dashboards, and recommendations.

Project Management Processes

Project Management Institute provides formalized project management process:

A Guide to Project Management Body of Knowledge (PMBOK® Guide) incorporates 5 process groups, 10 knowledge areas, and 49 processes.

- Planning is a priority as:
 - Plans permeate every activity
 - Plans can be executed when developed in advance
 - Planning ensures that process is well thought out
 - Planning makes sure that project participants know their roles and responsibilities
 - Eliminates confusion, rework, redundancy and conflict
 - Ensures that “greater good” drives project decisions
 - Plans are done at the level of detail sufficient to determine strategy, approach, and potential risks
 - Planning establishes how quality and success are measured – “When are we done”
 - Planning provides strategies for handling risks when realized

Project Management Business Documents

Project Business Documents	Definition
Project business case	A documented economic feasibility study used to establish the validity of the benefits of a selected component lacking sufficient definition and that is used as a basis for the authorization of further project management activities.
Project benefits management plan	The documented explanation defining the processes for creating, maximizing, and sustaining the benefits provided by a project.

Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide)* – Sixth Edition, Project Management Institute, Inc., 2017, Page 29

Project Management Business Documents: Business Case

A business case may include but is not limited to documenting the following:

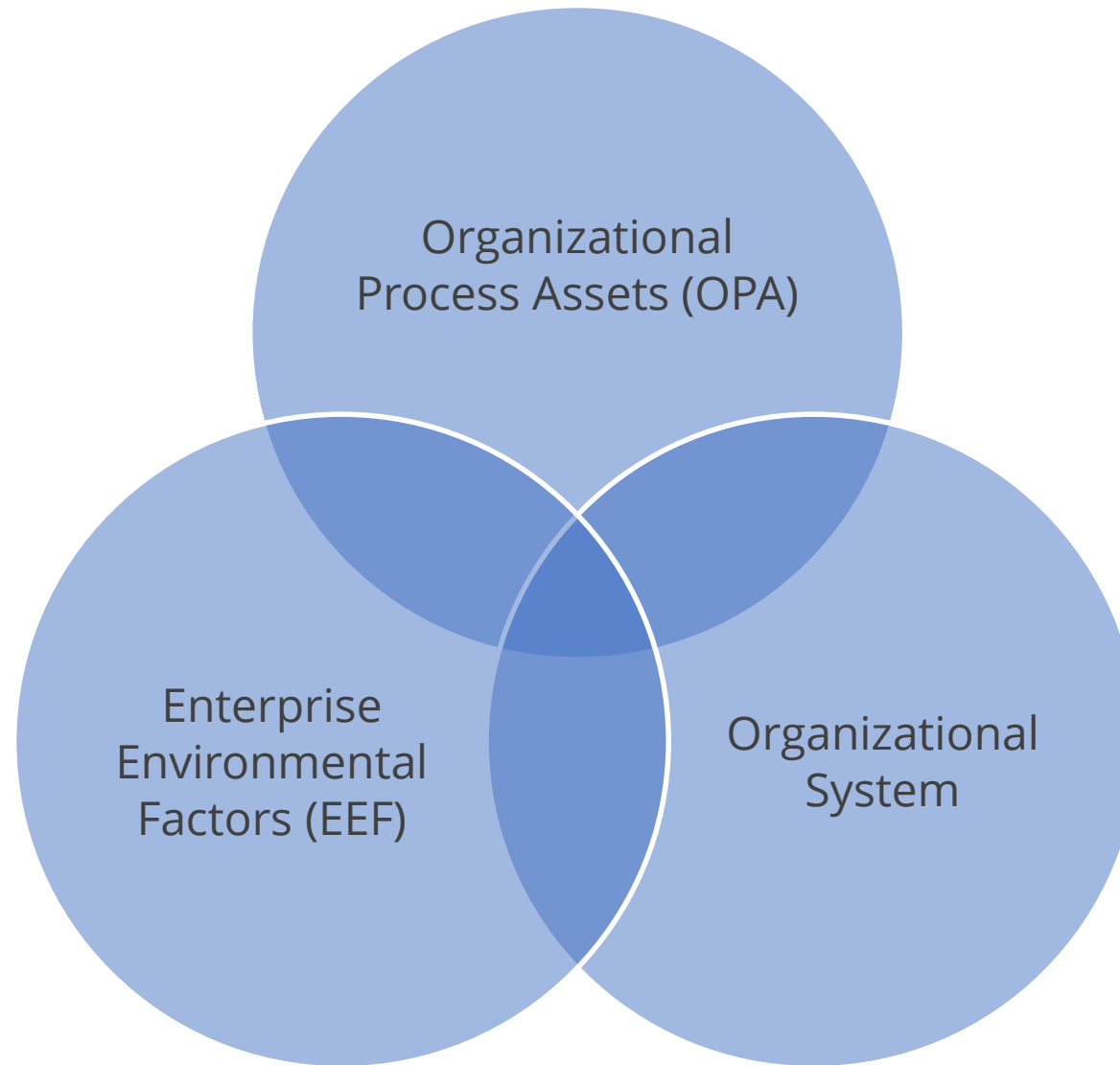
- Business need
- Analysis of the situation
- Options available:
 - Do nothing
 - Do the minimum work possible
 - Do more than the minimum work possible
- Recommendation
- Evaluation

Project Management Business Documents: Benefits Management Plan

The benefits management plan describes key elements of the benefits and may include but is not limited to documenting the following:

- Target benefits
- Strategic alignment
- Timeframe
- List of benefits owners
- Metrics
- Assumptions
- Risks

Influence on Project Management



Organizational Process Assets

The processes, policies, and procedures of a project include:

- Standards
- Quality policies and procedures, templates, guidelines, and tailoring
- Proposal evaluation criteria
- Performance measurement criteria
- Communication guidelines
- Project closure guidelines
- Financial control procedures
- Issue and defect management
- Change control, risk management, and work authorization

Organizational Process Assets

The corporate knowledge base of the project includes:

- Process measurement database
- Project files and historical information
- Issue and defect database
- Lessons learned
- Configuration management databases
- Financial databases

Enterprise Environmental Factors

Internal

- Organizational culture, structure, and governance
- Geographic distribution of facilities and resource
- Infrastructure
- IT software
- Resource availability
- Employee capability

External

- Market conditions
- Social and cultural influence, and issues
- Legal restrictions
- Commercial databases
- Academic research
- Government or industry standards
- Financial considerations
- Physical environmental elements

Organizational Systems

- Organizational system is a result of interaction of various factors in an organization.
- It determines power, competence, interests, and political capabilities of people.
- The three components of organizational systems are:
 - Management elements
 - Governance frameworks
 - Organizational structure types

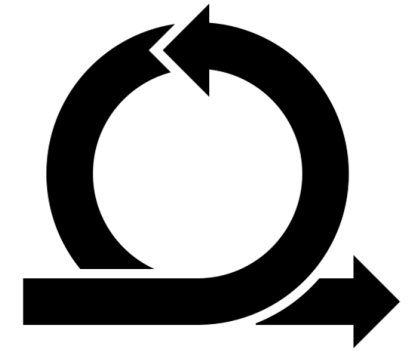
Organizational Structure Types

Organic or simple (N)	• Flexible, working side by side
Functional (N)	• Grouped based on nature of work
Multi-divisional (N)	• Decentralized (replicated) functions
Weak Matrix (L)	• Project management is a small task in functional
work Balanced Matrix (M)	• Project management is a skill within the functions
Strong Matrix (H)	• Project management is also a function
Project-oriented or composite (T)	• Projectized
Virtual (M)	• Network of people
Hybrid (X)	• Mix of various types
PMO (T)	• With Governance

PM authority: N(little/none), L(low), M(low to moderate), H(moderate to high), T(high to total), X(mixed)

Agile Mindset

- The *PMBOK® Guide*—Sixth Edition emphasizes agile project management techniques.
- These techniques are appropriate for projects with high degrees of new design and the project types that the organization may not have undertaken before.
- These projects have high degrees of uncertainty and require more collaboration to solve problems and create solutions.
- Examples of roles involved in high uncertainty work include engineers, product designers, doctors, and lawyers.
- These projects have high rates of change, complexity, and risk. This makes it difficult to define the bulk of requirements upfront and control changes through a change request process.
- Agile techniques emphasize exploration of feasibility in short cycles, often called iterations or sprints, and quick adaption based on evaluation and feedback.



Project Framework

PMP examination tips:

The PMP® exam is based on the project framework and the application of knowledge contained in it.

- Scenario questions describe a business situation and require you to give the next step in the process.
- Framework questions are based on current and next steps.
- Input/output questions ask for the details about a process.
- Each process of PMP is explained in this course, segmented by ten knowledge areas.

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 4.4 Manage Project Knowledge				8.2 Manage Quality	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	10.2 Manage Communications	11.6 Implement Risk Response	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	9.6 Control Resource	10.3 Monitor Communications	11.7 Monitor Risks	12.3 Control Procurements	13.4 Monitor Stakeholder Engagements
	Closing	4.7 Close Project or Phase									



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

PMI® Numbers: the “10,” the “5,” and the “49”

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
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Only Integration Is in All 5 Process Groups

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	Closing	4.7 Close Project or Phase									

2 Processes in Initiating Process Groups

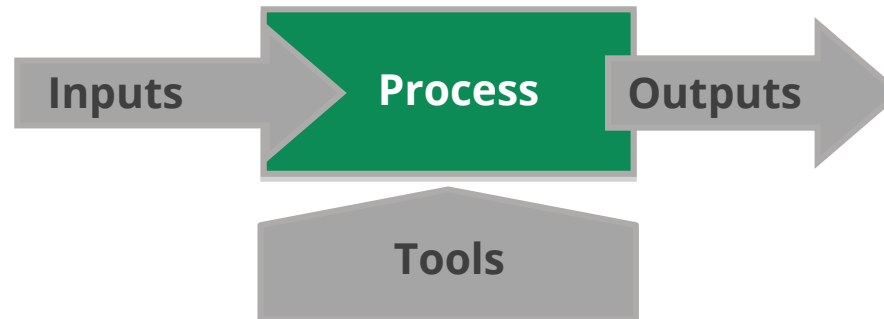
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PMI's Process Framework

Inputs, Outputs, and Tools

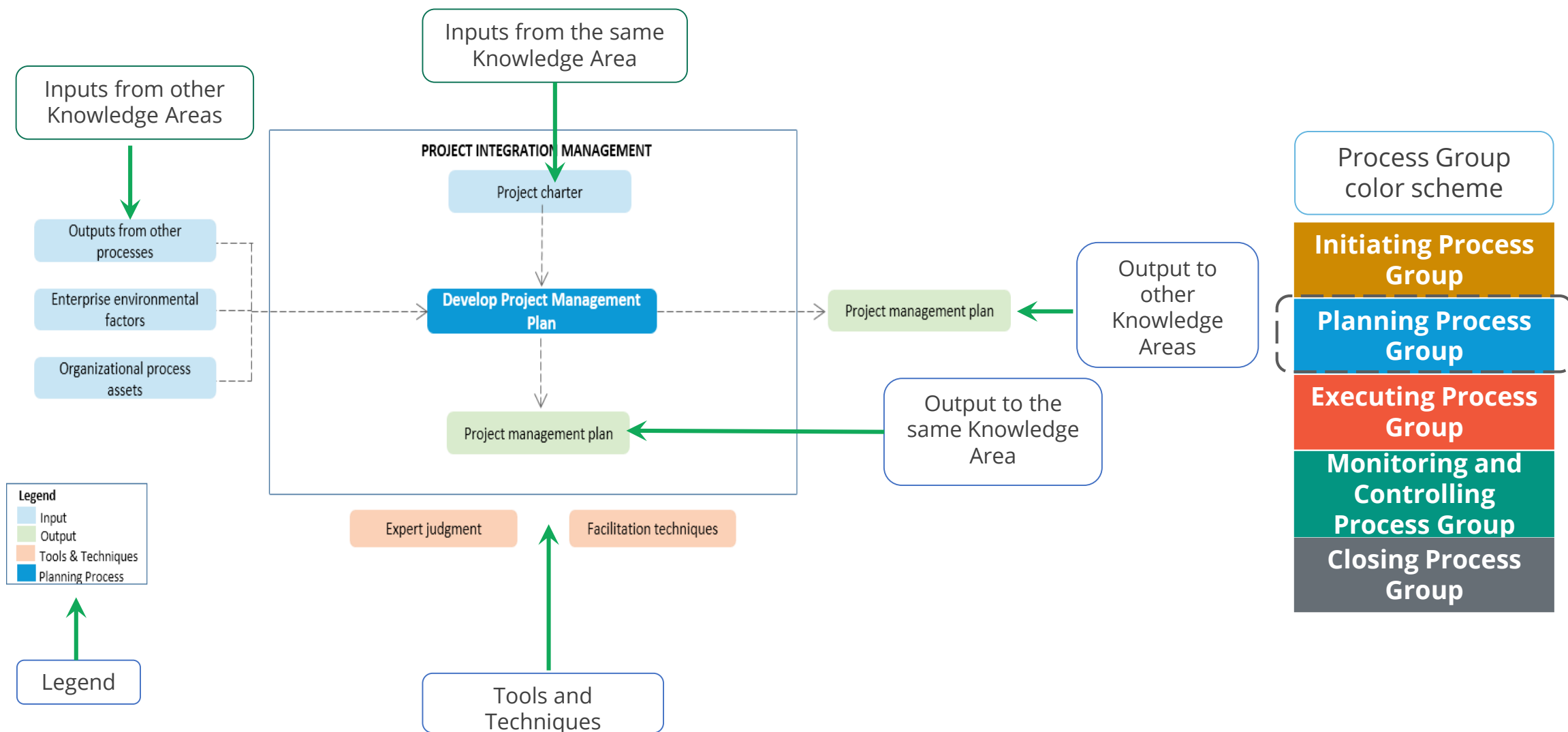
- All project management work can be described by one of the 49 processes.
- A process is defined by inputs, tools and techniques, and outputs.
- Every exam question will tie back to a process, knowledge area, or process group or to Professional and Social Responsibility.

A process is characterized by three elements:



To better structure ITTOs, the *PMBOK® Guide* structures them into groupings such as Data Gathering, Interpersonal and Team Skills, Data Analysis, and so on.

Reading a Process Diagram



Common Inputs

Inputs and Outputs have some similarities:

Enterprise environmental factors

- Anything that affects your project—examples include the culture, the organization, the PM's power, risk tolerance, and the market
- Used heavily in Initiating, Planning, and Monitoring and Controlling process groups

Organizational process assets

- Anything that helps projects and planning—examples include previous plans, documents, analytical data, policies, and systems
- Used heavily in all process groups

Project management plan

- Primary project document that directs execution, control, and closure—discussed in the next segment
- Used in all Executing, Monitoring and Controlling, and Closing process groups

Work performance data

- The raw observations and measurements identified during activities performed to carry out the project work

Work performance information

- Data collected from various controlling processes analyzed in context
- Used in Monitoring and Controlling process group

Project Terms

- Process
- Input
- Output
- Tools and techniques
- Knowledge Area
- Expert judgment
- Change requests
- Organizational process assets
- Work performance information

- Enterprise Environmental Factors
- Project Management Plan
- Process Group
- Initiating
- Planning
- Executing
- Monitoring and Controlling
- Closing



Key Takeaways

- ▷ Project management is the application of knowledge, skills, and tools and techniques to project activities to meet the project requirements.
- ▷ Project manager has to integrate various project aspects, like the people, stakeholders, risks, communication, and procurements with the project constraints (time, scope, cost, and quality).
- ▷ Projects differ from operations in that they are temporary and not repetitive in nature.
- ▷ Programs encapsulate multiple projects to achieve objectives that are not possible by managing projects individually.
- ▷ Portfolios are strategically aligned efforts combining programs, projects, and operational efforts in the pursuit of organizational objectives.



Key Takeaways

- ▷ PMO provides the policies, methodologies, and tools and templates for managing projects within the organization.
- ▷ Identifying internal and external stakeholders, determining their requirements, and communicating with them regularly is an important role of a project manager.
- ▷ Functional, projectized, and matrix are the three types of organization structures, based on the level of authority given to the project manager.
- ▷ Project life cycle begins at the initiation of a project and lasts until the closure, while product life cycle encompasses the operational and maintenance phases.
- ▷ Project life cycle follows 5 process groups: Initiating, Planning, Executing, Monitoring and Controlling, and Closing.
- ▷ Project life cycle can be iterative in nature and may go through the 5 process groups multiple times.
- ▷ PMI provides 10 Knowledge Areas, 5 Process Groups, and 49 processes.



Quiz

Quiz



1. A project manager is working on a project to construct a new bridge. The resources report to the functional manager and are mainly occupied with operational work. The project manager has no authority to assign resources. What type of organizational structure is the project manager in?

- A ► Functional
- B ► Projectized
- C ► Strong Matrix
- D ► Weak Matrix

Quiz



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- ☒ A Functional
- ☐ B Projectized
- ☐ C Strong Matrix
- ☐ D Weak Matrix



The correct answer is: **A**

In a functional organization, team members are more concerned with their daily functional activities than with the project activities.

Quiz



2. Who does the project team report to in a projectized organization?

- A ▶ No one
- B ▶ Project manager
- C ▶ Functional manager
- D ▶ CEO

Quiz



2. Who does the project team report to in a projectized organization?

- A ▶ No one
- B ▶ Project manager
- C ▶ Functional manager
- D ▶ CEO



The correct answer is: **B**

In a projectized organization, project team reports to the project manager.

Quiz



3. How is project life cycle different from product life cycle?

- A ▶ Project life cycle has no methodology
- B ▶ Project life cycle depends on the control needs of the performing organization
- C ▶ Project life cycle can contain many product life cycles
- D ▶ Project life cycle only includes specific project management activities

Quiz



3. How is project life cycle different from product life cycle?

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- ☐ B Project life cycle depends on the control needs of the performing organization
- ☐ C Project life cycle can contain many product life cycles
- ☐ D Project life cycle only includes specific project management activities



The correct answer is: **B**

A project life cycle depends on the control needs of the performing organization. Choice C is just the opposite, i.e., a product life cycle can include many projects in its life cycle, not the other way around.

Quiz



4. What does ITTO stand for?

- A ▶ Information, Tools, Techniques, Outputs
- B ▶ Inputs, Timing, Tasks, Outputs
- C ▶ Inputs, Tools, Techniques, Outputs
- D ▶ Information, Tools, Tasks, Outcomes

Quiz



4. What does ITTO stand for?

- ☐ A Information, Tools, Techniques, Outputs
- ☐ B Inputs, Timing, Tasks, Outputs
- ☒ C Inputs, Tools, Techniques, Outputs
- ☐ D Information, Tools, Tasks, Outcomes



The correct answer is: **C**

ITTO stands for Inputs, Tools, Techniques, and Outputs.

Quiz



5. Which of the following is not a characteristic of a project?

- A ▶ Repeats every week
- B ▶ Temporary
- C ▶ Definite beginning and end
- D ▶ Interrelated activities

Quiz



5. Which of the following is not a characteristic of a project?

- ☐ A Repeats every week
- ☐ B Temporary
- ☐ C Definite beginning and end
- ☐ D Interrelated activities



The correct answer is: **A**

Characteristics of a project are based on the project definition. Except for option a, the other options are part of the project definition.

Quiz



6. As a project manager, you have started a new project. Several stakeholders raise concerns about the quality of the new project management software provided by the PMO and the way project changes would be logged. As a project manager, what should you do?

- A ► Provide training material on the new project management software.
- B ► Inform the project management office about the stakeholders' concerns.
- C ► Conduct an informal training session.
- D ► Assure the stakeholders that you will keep them engaged in the project and that the new software will in no way negatively impact them.

Quiz



6. As a project manager, you have started a new project. Several stakeholders raise concerns about the quality of the new project management software provided by the PMO and the way project changes would be logged. As a project manager, what should you do?

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- B** ▶ Inform the project management office about the stakeholders' concerns.
- C** ▶ Conduct an informal training session.
- D** ▶ Assure the stakeholders that you will keep them engaged in the project and that the new software will in no way negatively impact them.



The correct answer is: **B**

Although all the options look correct, informing the PMO is the best choice. The PMO controls the project management procedures and tools. PMI would like a mature organization to have a dedicated PMO, and deferring to the PMO for this would be the right option.

Quiz



7. Identify the least important stakeholder from the given options.

- A ▶ The project manager who is responsible for building the project
- B ▶ A project team member who will work on the project
- C ▶ Customer who will use the end product or service
- D ▶ Competitor whose organization will be affected by the new product release

Quiz



7. Identify the least important stakeholder from the given options.

- A ▶ The project manager who is responsible for building the project
- B ▶ A project team member who will work on the project
- C ▶ Customer who will use the end product or service
- D ▶ Competitor whose organization will be affected by the new product release



The correct answer is: **D**

Stakeholders are persons or organizations that are actively involved in the project or who may be positively or negatively affected by the performance or completion of the project. Competitor is the least important stakeholder.

Quiz



8. A project manager is working on a project to construct a new bridge. The resources report to the functional manager and are mainly occupied with operational work. The project manager has no authority to assign resources. What type of organizational structure is the project manager in?

- A ► Functional
- B ► Projectized
- C ► Strong Matrix
- D ► Weak Matrix

Quiz



8. A project manager is working on a project to construct a new bridge. The resources report to the functional manager and are mainly occupied with operational work. The project manager has no authority to assign resources. What type of organizational structure is the project manager in?

- ☒ A Functional
- ☐ B Projectized
- ☐ C Strong Matrix
- ☐ D Weak Matrix



The correct answer is: **A**

In a functional organization, team members are more concerned with their daily functional activities than with the project activities.

Quiz



9. Who does the project team report to in a projectized organization?

- A ▶ No one
- B ▶ Project manager
- C ▶ Functional manager
- D ▶ CEO

Quiz



9. Who does the project team report to in a projectized organization?

- A ▶ No one
- B ▶ Project manager
- C ▶ Functional manager
- D ▶ CEO



The correct answer is: **B**

In a projectized organization, project team reports to the project manager.

Quiz



10. Which of the following is not true about project life cycle?

- A ➤ Cost of changes increases as the project approaches completion
- B ➤ Stakeholder influences are greatest toward the end of the project
- C ➤ Risk and uncertainty are greatest at the start of the project
- D ➤ Cost and staffing levels are low at the start, peak as the work is carried out, and drop rapidly as the project draws to a close

Quiz



10. Which of the following is not true about project life cycle?

- ☐ A Cost of changes increases as the project approaches completion
- ☐ B Stakeholder influences are greatest toward the end of the project
- ☐ C Risk and uncertainty are greatest at the start of the project
- ☐ D Cost and staffing levels are low at the start, peak as the work is carried out, and drop rapidly as the project draws to a close



The correct answer is: **B**

Stakeholder influences are greatest toward the beginning of the project.

Quiz



11. How many Process Groups, Knowledge Areas, and Processes are covered in the *PMBOK® Guide*?

- A 5, 10, 47
- B 5, 10, 49
- C The *PMBOK® Guide* is flexible and does not have a specific number of groups, knowledge areas, or processes.
- D 4, 9, 48

Quiz



11. How many Process Groups, Knowledge Areas, and Processes are covered in the *PMBOK® Guide*?

- A ▶ 5, 10, 47
- B ▶ 5, 10, 49
- C ▶ The *PMBOK® Guide* is flexible and does not have a specific number of groups, knowledge areas, or processes.
- D ▶ 4, 9, 48



The correct answer is: **B**

The *PMBOK® Guide* v6 now has 49 processes, which reflects addition of three new processes (Manage Project Knowledge, Control Resources, Implement Risk Responses) and removal of one process (Close Procurements).

Quiz



12. In which Process Group is the majority of a project's costs incurred?

- A ▶ Initiating
- B ▶ Planning
- C ▶ Execution
- D ▶ Closure

Quiz



12. In which Process Group is the majority of a project's costs incurred?

- A ▶ Initiating
- B ▶ Planning
- C ▶ Execution
- D ▶ Closure



The correct answer is: **C**

Execution is where the project teams deliver the work specified in the Initiation phase and planned in the Planning phase. Execution is when the project resources are onboarded, and most of the project costs are incurred.

This concludes
“Project Management
Framework.”



The next lesson is
“Project Management
Processes.”

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

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