Crosswind Learning

Version 6.1 Updated for the 2021
Project Management Professional (PMP)® Exam

Crosswind Success Series: PMP® Exam Bootcamp Manual

www.crosswindpm.com
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Version 6.1 aligned with the Project Management Institute, *A Guide to the Project Management Body of Knowledge, (PMBOK® Guide)* - Sixth Edition, Project Management Institute Inc., 2017

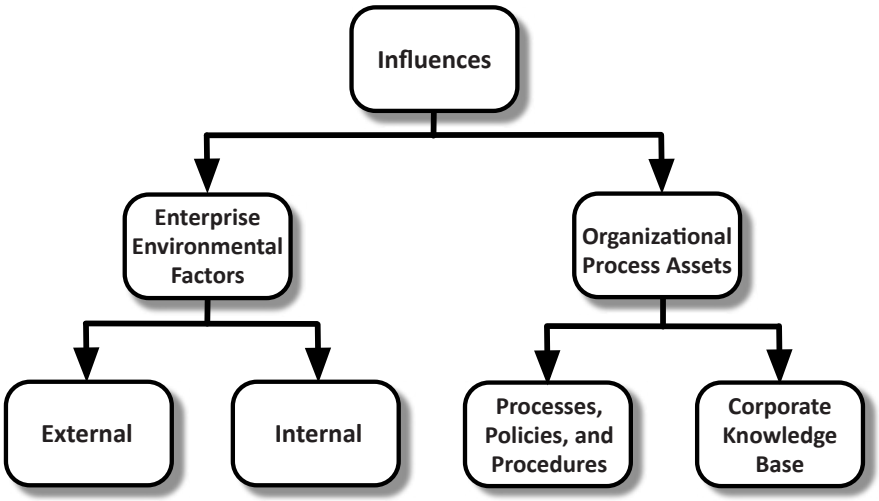

Figure 3-5: Project Influences

The source for the above figure is the Project Management Institute, *A Guide to the Project Management Body of Knowledge*, (*PMBOK® Guide*) – Sixth Edition, Project Management Institute Inc., 2017, Figure 2-1, Page 37

3.7. Overlap of Disciplines

To be successful, the project manager must know about project management, the project management system, the project management life cycle, the project life cycle, and the product life cycle. The project manager must also understand how those life cycles interact.

Project Management	Project management is the **application of information, skills, tools, and techniques to project activities in order to meet project needs**. It can include developing requirements, determining realistic goals, managing the triple constraint, and adapting the various plans to achieve project goals. Project management starts with selecting the processes associated with completing the work of the project and typically involves using an established methodology to align project and product requirements with the product specifications.
Project Management System	The project management system is a set of procedures, tools and techniques, processes, and methodologies used to manage projects. The system can be formal or informal and is typically supported by the project management plan during the execution of the project work. Examples of a project management system are: Agile, waterfall, hybrid, Kanban, and Lean.
Project Management Life Cycle (PMLC)	The project management life cycle includes the five process groups: initiating, planning, executing, monitoring and controlling, and closing. These process groups **can be applied to a project or to individual project phases.**

Project Life Cycle	The project life cycle includes the **project work processes.** For each phase, it describes the work being performed, who is performing the work, the deliverables, and the approval process. Examples of a work process are the building process for home construction and the development process for a computer program. The project life cycle typically coexists with the project management life cycle.
Product Life Cycle	The product life cycle **includes the product or service from concept to divestment (closure),** typically starting with a business plan, moving through the project that results in the product or service, then transitioning the product or service to operations, and ending with the retirement of the product or service.

Figure 3-6: Life Cycle Interaction demonstrates how the three life cycles interrelate. For the exam, it is important to know the characteristics and purpose of each type.

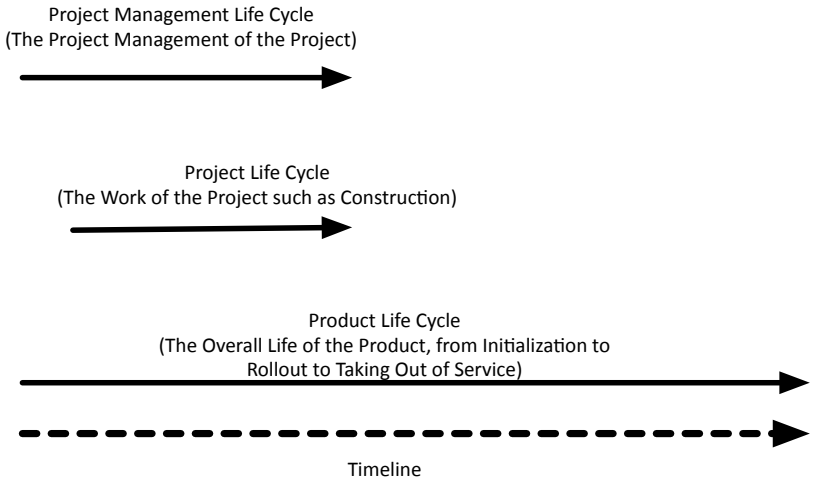

Figure 3-6: Life Cycle Interaction

It is also important that the project manager possesses technical knowledge relevant to the project, an understanding of the project environment, general management ability, and interpersonal (soft) skills.

The project environment includes **cultural, social, political, and international** variables.

General management ability includes having the ability to manage such areas as financing, purchasing (procurement), sales, law, manufacturing and logistics, health (safety), and information technology.

Interpersonal skills include communication, **influence**, leadership, motivation, **negotiation**, team building, decision-making, and political and cultural awareness.

The source for the above text is the Project Management Institute, *A Guide to the Project Management Body of Knowledge*, (*PMBOK® Guide*) – Sixth Edition, Project Management Institute Inc., 2017, Pages 19, 547-549, and 715-716

3.8. Projects

Know the characteristics of a project.

A project is a temporary initiative that creates business value. It has a **specific purpose**, creates **unique results**, drives **organizational change**, and has a **definite start and finish**.

It is initiated in response to:

- A stakeholder need or request
- A legal, regulatory, or social requirement
- A business or technological strategy
- A product, process, or service that needs to be created, enhanced, or corrected

A project is executed based on a progressively elaborated project management plan. **Progressive elaboration** is the refinement of the plan as new information relevant to the work of the project is discovered. This often involves multiple incremental changes.

A project may have subprojects, which are created when the project needs to be broken down into more manageable pieces. A common example of a **subproject** is the installation of a roof during a residential home construction project.

A project may be standalone or part of a program or portfolio.

3.8.1. Operations Management

Operations management consists of managing operational resources and the **day-to-day** activities of the organization. Operations managers must direct the planning, execution, and monitoring and controlling of the work.

3.8.2. Project Management Office (PMO)

The Project Management Office (PMO) is a group that standardizes project governance and simplifies the sharing of resources, tools, techniques, and methodologies.

The approach the PMO may take can be:

- **Directive**
  PMO directly manages projects
- **Controlling**
  PMO provides support and requires compliance in the form of adoption of mandated project management frameworks, governance frameworks, and/or tools and documentation
- **Supportive**
  PMO provides project management templates, best practices, lessons learned, and access to other supportive information

The authority of the PMO depends on the organization.

The source for the above text is the Project Management Institute, *A Guide to the Project Management Body of Knowledge*, (*PMBOK® Guide*) – Sixth Edition, Project Management Institute Inc., 2017, Pages 4-19

3.9. Triple Constraint

Know the triple constraint and how it functions.

One of the most basic foundations of traditional project management is the triple constraint: Scope, Schedule, and Cost.

- Scope is the description, typically in the form of written requirements, of the expected product, service, or result of the project
- Schedule details the amount of time necessary to deliver the product, service, or result of the project (*The schedule cannot be determined until scope is defined)*
- Cost is the amount of money needed to deliver the product, service, or result of the project and cannot be determined until schedule is determined

Unless otherwise stated, all three constraints are of equal importance. Achievement of the scope, schedule, and cost goals results in achieving quality.

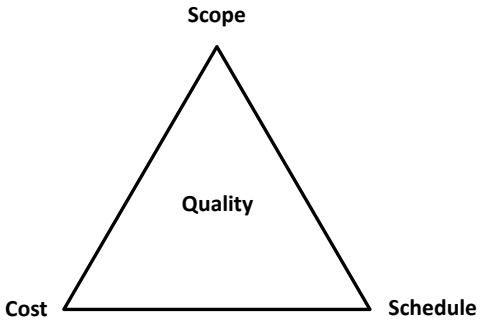

Figure 3-7: Triple Constraint

A more modern approach to the triple constraint is the enhanced triple constraint, which includes risk and resources. Risk and resources can have significant influence on a project and can influence the scope, schedule, cost, and quality goals of the project.

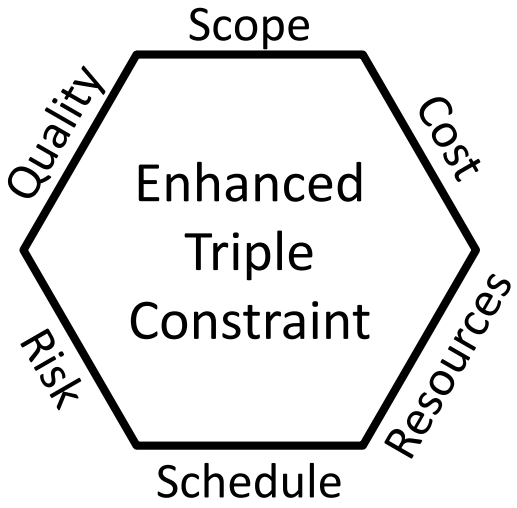

Figure 3-8: Enhanced Triple Constraint