

# CHAPTER 1 : INTRODUCTION



*Prepared by :*

*Dr : Yasser Abdalshafy Gamal*

*PhD in structural Engineering*

*PMP from PMI (Project Management Institute)*

# 1.1 OVERVIEW AND PURPOSE OF THIS GUIDE

- *Project management* is *not new*. It has been in use for **hundreds of years**. Examples of project outcomes include:
  - Pyramids of Giza,
  - Olympic games,
  - Great Wall of China
- The **outcomes** of these projects were the result of leaders and managers **applying project management practices, principles, processes, tools, and techniques** to their work.
- By **the mid-20<sup>th</sup> century**, project managers began the work of **seeking recognition** for project **management** as a **profession**.
- PMI developed and published ***A Guide to the Project Management Body of Knowledge (PMBOK® Guide)***.

## 1.1 OVERVIEW AND PURPOSE OF THIS GUIDE

- This *PMBOK® Guide* identifies a subset of the project management body of knowledge that is generally recognized as good practice.
- Generally **recognized** means the knowledge and practices described are applicable to most projects most of the time, and there is consensus about their value and usefulness.
- **Good practice** means there is general agreement that the application of the knowledge, skills, tools, and techniques to project management processes can enhance the chance of success over many projects in delivering the expected business values and results.

## 1.1 OVERVIEW AND PURPOSE OF THIS GUIDE

- Determining the appropriate combination of processes, inputs, tools, techniques, outputs and life cycle phases to manage a project is referred to as “**tailoring**” the application of the knowledge described in this guide.
- This **PMBOK® Guide** is different from a methodology.
  - A **methodology** is a system of practices, techniques, procedures, and rules used by those who work in a discipline.
  - This **PMBOK® Guide** is a foundation upon which organizations can build methodologies, policies, procedures, rules, tools and techniques, and life cycle phases needed to

## 1.1.1 THE STANDARD FOR PROJECT MANAGEMENT

- The **standard** is a **document** established by an **authority**, **custom**, or general **consent** as a model or example
- The *Standard for Project Management* was developed using a **process** based on the **concepts** of **consensus**, **openness**, due process, and balance.
- The *Standard for Project Management* is a **foundational** reference for PMI's project management professional development programs and the practice of project management. Because project management needs to be tailored to fit the needs of the project, the **standard** and the **guide** are both based on **descriptive practices**, rather than **prescriptive practices**

## 1.1.2 COMMON VOCABULARY

- A **common vocabulary** is an essential element of a professional discipline. The PMI **Lexicon** of Project Management Terms [4] provides the **foundational professional vocabulary** that can be consistently used by organizations, portfolio, program, and project managers and other project stakeholders.



lexicon

## 1.1.3 CODE OF ETHICS AND PROFESSIONAL CONDUCT

- PMI publishes the **Code of Ethics and Professional Conduct** [5] to **instill confidence** in the project **management profession** and to help an individual in making **wise** decisions, particularly when faced with difficult situations where the **individual** may be asked to **compromise** his or her integrity or values.
- **The values** that the global project management **community** defined as most important were **responsibility, respect, fairness, and honesty**. The *Code of Ethics and Professional Conduct* **affirms** these four values as its foundation.
- The *Code of Ethics and Professional Conduct* includes both **aspirational standards** and **mandatory standards**.
  - **aspirational standards** describe the conduct that practitioners, who are also PMI members, certification holders, or **volunteers, strive** to uphold
  - **The mandatory standards** establish **firm** requirements and, in some cases, limit or **prohibit** practitioner behavior

## 1.2 FOUNDATIONAL ELEMENTS

### 1.2.1 PROJECTS:

- A **project** is a **temporary endeavor** undertaken to **create** a **unique product, service, or result**
  - **Unique product, service, or result:** However, each building project remains unique in key characteristics (e.g., location, design, environment, situation, people involved)
  - **Temporary endeavor.** The temporary nature of projects indicates that a project has a **definite beginning** and end. **Temporary** does **not** necessarily mean a project has a **short duration**.



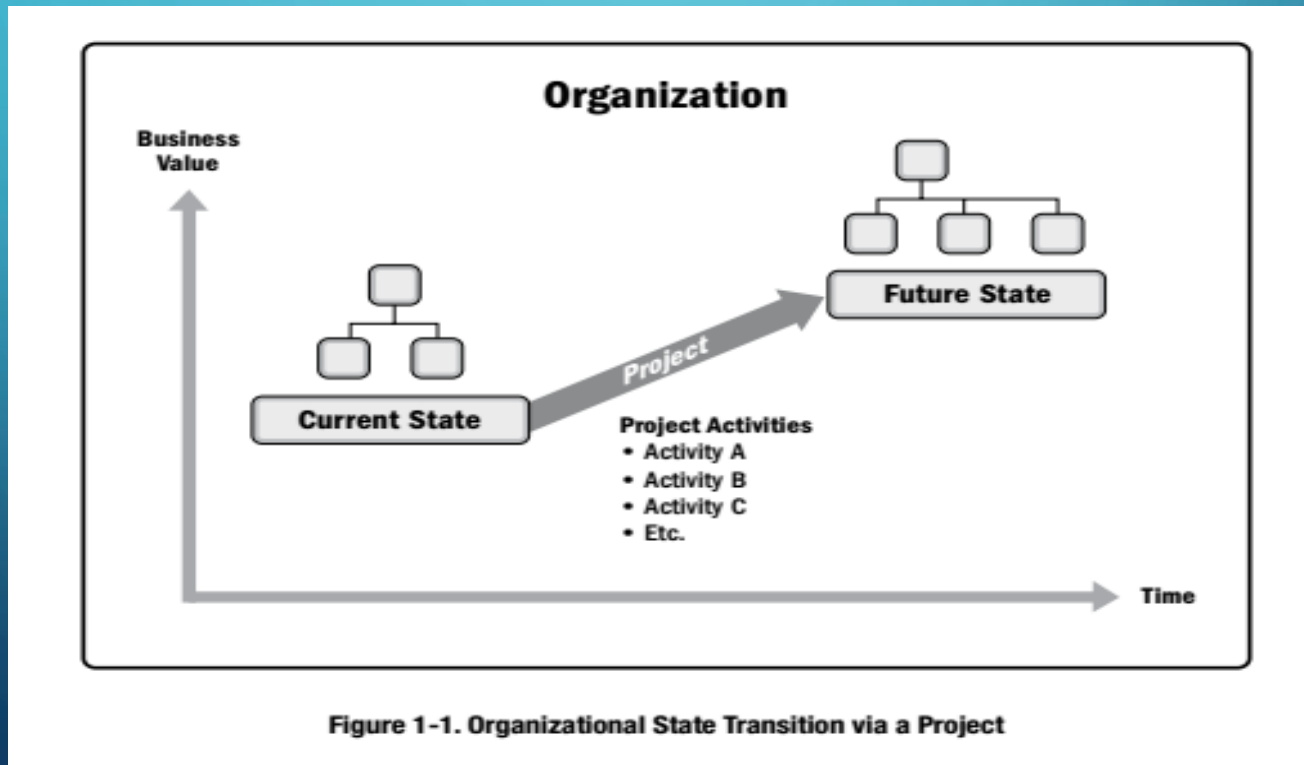
## 1.2 FOUNDATIONAL ELEMENTS

### 1.2.1 PROJECTS:

- The **end** of the **project** is **reached** when one or more of the following is true:
  - The project's **objectives** have been **achieved**;
  - The **objectives** will **not** or **cannot** be **met**;
  - Funding is **exhausted** or no **longer available** for **allocation** to the project;
  - The **need** for the **project no longer exists**
  - The **human** or physical **resources** are **no longer available**;
  - Or The project is terminated for **legal** cause or **convenience**.
- Projects are **temporary**, but their **deliverables** may **exist beyond**

## 1.2 FOUNDATIONAL ELEMENTS

- **1.2.1 PROJECTS:**
- **PROJECTS DRIVE CHANGE.**
- Projects **drive change** in **organizations**. From a **business perspective**, a project is aimed at moving an organization from **one state** to **another state** in order to achieve a **specific objective**.



# 1.2 FOUNDATIONAL ELEMENTS

- **1.2.1 PROJECTS:**

- **PROJECTS ENABLE BUSINESS VALUE CREATION**

- PMI defines **business value** as the **net quantifiable benefit** derived from a **business endeavor**. The benefit may be **tangible**, **intangible**, or both

## Examples of **tangible elements**

include:

**Monetary assets,**

**Stockholder equity,**

**Utility, Fixtures,**

**Tools, and Market share**

## Examples of **intangible elements** include:

**Goodwill,**

**Brand recognition,**

**Public benefit,**

**Trademarks,**

**Strategic alignment, and**

**Reputation**

# 1.2 FOUNDATIONAL ELEMENTS

## 1.2.1 PROJECTS:

### PROJECT INITIATION CONTEXT

- Organizational leaders initiate projects in **response** to **factors acting** upon their **organizations**. There are **four fundamental categories** for these factors, which illustrate the context of a project.
  - Meet **regulatory, legal, or social requirements**;
  - Satisfy **stakeholder requests or needs**;
  - Implement or change business or technological strategies**;
  - and Create, **improve, or fix products, processes, or services**.

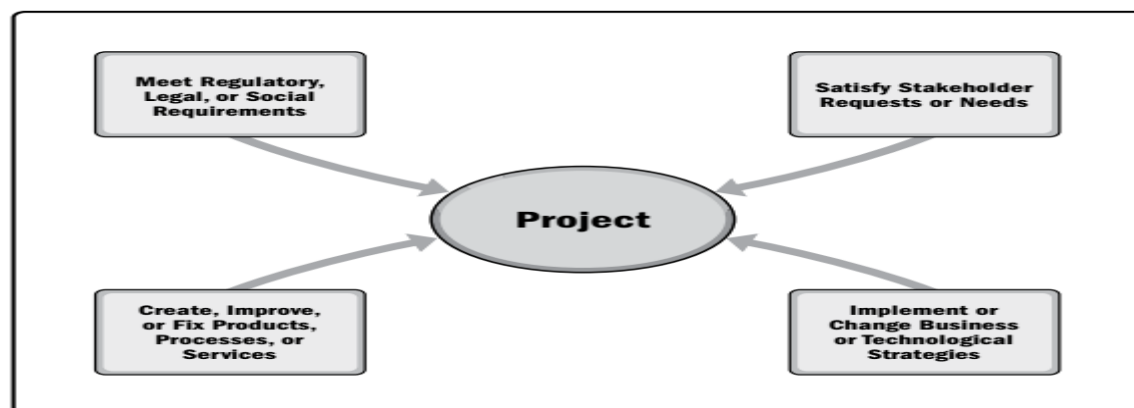


Figure 1-2. Project Initiation Context

# 1.2 FOUNDATIONAL ELEMENTS

## 1.2.1 PROJECTS:

### PROJECT INITIATION CONTEXT

- Leaders respond to these factors in order to keep the organization viable ,These factors ultimately should **link** to the **strategic objectives** of the **organization** and the **business value** of each project.

Table 1-1. Examples of Factors that Lead to the Creation of a Project

Specific Factor	Examples of Specific Factors	Meet Regulatory, Legal, or Social Requirements	Satisfy Stakeholder Requests or Needs	Create, Improve, or Fix Products, Processes, or Services	Implement or Change Business or Technological Strategies
New technology	An electronics firm authorizes a new project to develop a faster, cheaper, and smaller laptop based on advances in computer memory and electronics technology			X	X
Competitive forces	Lower pricing on products by a competitor results in the need to lower production costs to remain competitive				X
Material issues	A municipal bridge developed cracks in some support members resulting in a project to fix the problems	X		X	
Political changes	A newly elected official instigating project funding changes to a current project				X
Market demand	A car company authorizes a project to build more fuel-efficient cars in response to gasoline shortages		X	X	X
Economic changes	An economic downturn results in a change in the priorities for a current project				X
Customer request	An electric utility authorizes a project to build a substation to serve a new industrial park		X	X	
Stakeholder demands	A stakeholder requires that a new output be produced by the organization		X		
Legal requirement	A chemical manufacturer authorizes a project to establish guidelines for the proper handling of a new toxic material	X			
Business process improvements	An organization implements a project resulting from a Lean Six Sigma value stream mapping exercise			X	
Strategic opportunity or business need	A training company authorizes a project to create a new course to increase its revenues			X	X
Social need	A nongovernmental organization in a developing country authorizes a project to provide potable water systems, latrines, and sanitation education to communities suffering from high rates of infectious diseases		X		
Environmental concerns	A utility company authorizes a project to create a new service for electric car charging to reduce pollution			X	X

## 1.2.2 THE IMPORTANCE OF PROJECT MANAGEMENT

- Project management is the **application** of **knowledge, skills, tools,** and **techniques** to project **activities** to meet the project **requirements**, Project management enables organizations to execute projects **effectively** and **efficiently**.

**Effective project management helps** individuals, groups, and public and private organizations to:

- meet business objectives; Satisfy stakeholder expectations;** Be more predictable; Increase chances of success; **Deliver the right products** at the **right time; Resolve problems** and **issues;**
- Respond to risks** in a **timely manner;**
- Optimize the use of organizational resources;**
- Identify, **recover,** or **terminate failing projects;**
- Manage constraints,**
- Balance the **influence** of **constraints** on the project
- And **Manage change** in a better manner.

**Poorly managed** projects or the **absence** of project management may result in:

- Missed deadlines, Cost overruns,**
- Poor quality, Rework,**
- Uncontrolled expansion** of the project,
- Loss of **reputation** for the organization,
- Unsatisfied stakeholders,** and
- Failure** in achieving the **objectives** for which the project was undertaken.

## 1.2.2 THE IMPORTANCE OF PROJECT MANAGEMENT

- In today's business environment, organizational leaders need to be able to **manage** with **tighter budgets**, **shorter timelines**, **scarcity** of **resources**, and **rapidly changing technology**.
- The business environment is **dynamic** with an **accelerating rate** of **change**.



## 1.2.3 RELATIONSHIP OF PROJECT, PROGRAM, PORTFOLIO, AND OPERATIONS MANAGEMENT

### 1.2.3.1 OVERVIEW

- A project may be managed in **three separate scenarios**: as a stand-alone **project** (outside of a portfolio or program), within a **program**, or within a **portfolio**.
- A **program** is defined as a group of **related projects, subsidiary programs, and program activities** managed in a **coordinated manner** to obtain **benefits not available** from **managing** them **individually**. Programs are not large projects.
- A very large project may be referred to as a **megaproject** megaprojects cost **US\$1 billion** or more, affect **1 million** or more people, and run for years.
- A **portfolio** is defined as **projects, programs, subsidiary portfolios, and operations** managed as a **group** to achieve **strategic objective**.



## 1.2.3 RELATIONSHIP OF PROJECT, PROGRAM, PORTFOLIO, AND OPERATIONS MANAGEMENT

- Organizational and portfolio planning impact the components by means of **prioritization** based on **risk**, **funding**, and other considerations

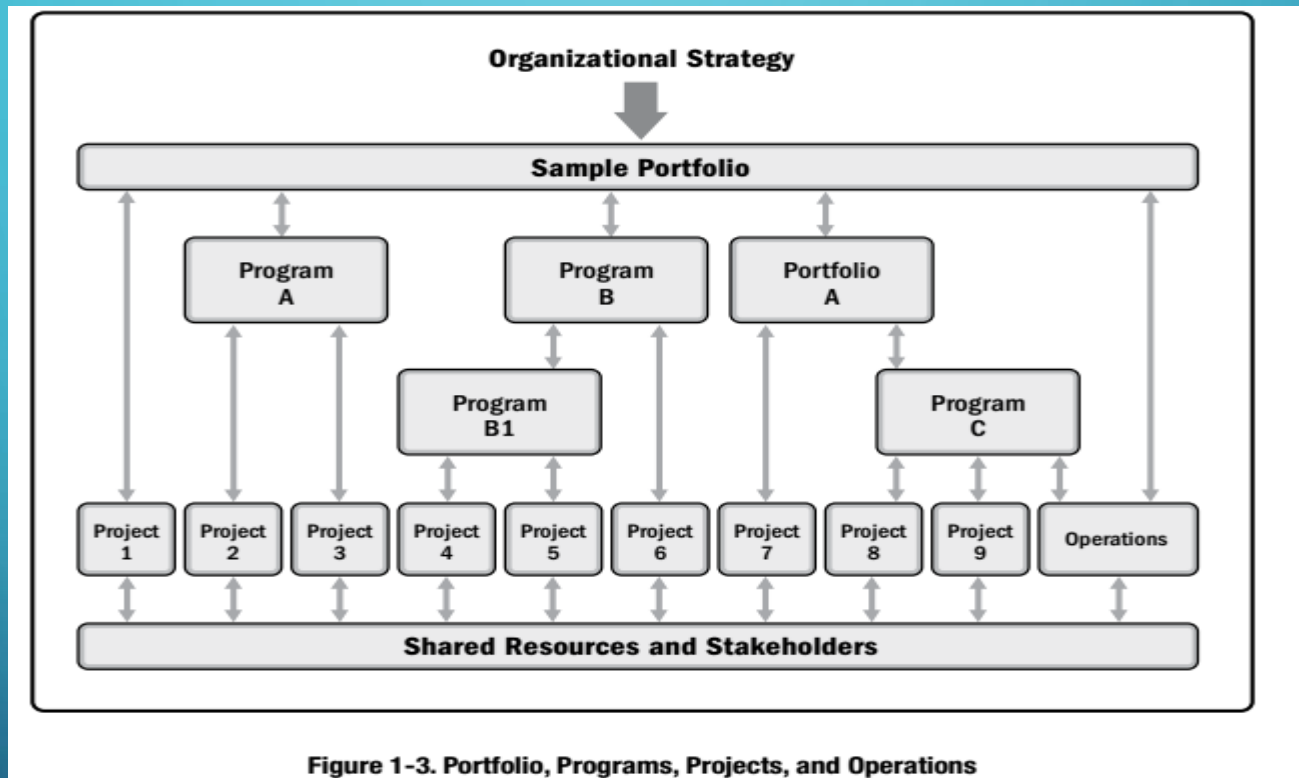


Figure 1-3. Portfolio, Programs, Projects, and Operations

- Program** and **project management** focus on **doing programs** and **projects** the “right” way;
- And **Portfolio management** focuses on **doing** the “right” **programs** and **projects**

## 1.2.3 RELATIONSHIP OF PROJECT, PROGRAM, PORTFOLIO, AND OPERATIONS MANAGEMENT

Organizational Project Management			
	Projects	Programs	Portfolios
Definition	A project is a temporary endeavor undertaken to create a unique product, service, or result.	A program is a group of related projects, subsidiary programs, and program activities that are managed in a coordinated manner to obtain benefits not available from managing them individually.	A portfolio is a collection of projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives.
Scope	Projects have defined objectives. Scope is progressively elaborated throughout the project life cycle.	Programs have a scope that encompasses the scopes of its program components. Programs produce benefits to an organization by ensuring that the outputs and outcomes of program components are delivered in a coordinated and complementary manner.	Portfolios have an organizational scope that changes with the strategic objectives of the organization.
Change	Project managers expect change and implement processes to keep change managed and controlled.	Programs are managed in a manner that accepts and adapts to change as necessary to optimize the delivery of benefits as the program's components deliver outcomes and/or outputs.	Portfolio managers continuously monitor changes in the broader internal and external environments.

## 1.2.3 RELATIONSHIP OF PROJECT, PROGRAM, PORTFOLIO, AND OPERATIONS MANAGEMENT

<b>Organizational Project Management</b>			
	<b>Projects</b>	<b>Programs</b>	<b>Portfolios</b>
<b>Planning</b>	Project managers progressively elaborate high-level information into detailed plans throughout the project life cycle.	Programs are managed using high-level plans that track the interdependencies and progress of program components. Program plans are also used to guide planning at the component level.	Portfolio managers create and maintain necessary processes and communication relative to the aggregate portfolio.
<b>Management</b>	Project managers manage the project team to meet the project objectives.	Programs are managed by program managers who ensure that program benefits are delivered as expected, by coordinating the activities of a program's components.	Portfolio managers may manage or coordinate portfolio management staff, or program and project staff that may have reporting responsibilities into the aggregate portfolio.
<b>Monitoring</b>	Project managers monitor and control the work of producing the products, services, or results that the project was undertaken to produce.	Program managers monitor the progress of program components to ensure the overall goals, schedules, budget, and benefits of the program will be met.	Portfolio managers monitor strategic changes and aggregate resource allocation, performance results, and risk of the portfolio.
<b>Success</b>	Success is measured by product and project quality, timeliness, budget compliance, and degree of customer satisfaction.	A program's success is measured by the program's ability to deliver its intended benefits to an organization, and by the program's efficiency and effectiveness in delivering those benefits.	Success is measured in terms of the aggregate investment performance and benefit realization of the portfolio.

## 1.2.3.2 PROGRAM MANAGEMENT

- **Program management** is defined as the application of knowledge, skills, and principles to a **program** to achieve the **program objectives** and to obtain **benefits** and **control not available** by **managing** program components **individually**.
- A program component refers to projects and other programs within a program.
- **An example of a program** is a **new communications satellite** system with projects for the design and construction of the satellite and the ground stations, the launch of the satellite, and the integration of the system.

### 1.2.3.3 PORTFOLIO MANAGEMENT

- A **portfolio** is defined as **projects, programs, subsidiary portfolios,** and **operations** managed as a group to achieve **strategic objectives**.
- Portfolio management is defined as the **centralized management of one or more portfolios to achieve strategic objectives.**
- Portfolio management also confirms that the portfolio is **consistent** with and **aligned** with **organizational strategies** .
- For example, an infrastructure organization that has the strategic objective of maximizing the return on its **investments** may put together a portfolio that includes a mix of projects in oil and **gas, power, water, roads, rail, and airports.**

## 1.2.3.4 OPERATIONS MANAGEMENT

- **Operations management** is concerned with the **ongoing production** of **goods and/or services**.
- It ensures that **business operations** continue efficiently by using the **optimal resources needed to meet customer demands**.
- It is concerned with managing processes that **transform inputs** (e.g., **materials, components, energy, and labor**) into **outputs** (e.g., **products, goods, and/or services**)

## 1.2.3.5 OPERATIONS AND PROJECT MANAGEMENT

- **Changes in business** or organizational operations may be the **focus** of a **project**.
- **Projects** can **intersect** with **operations** at **various points** during the **product life cycle**, such as; When developing a **new product, upgrading a product, or expanding outputs**; While **improving operations** or the **product development process**; At the end of the **product life cycle**; and At each **closeout phase**.

### 1.2.3.6 ORGANIZATIONAL PROJECT MANAGEMENT (OPM) AND STRATEGIES

- **Portfolios**, **programs**, and **projects** are aligned with or **driven** by **organizational strategies** and differ in the way each contributes to the achievement of strategic goals:
  - **Portfolio management** aligns **portfolios** with organizational **strategies** by selecting the **right programs** or **projects**, **prioritizing** the **work**, and **providing** the **needed resources**.
  - **Program management** **harmonizes** its **program components** and **controls** interdependencies in order to realize **specified benefits**.
  - **Project** management enables the **achievement** of **organizational goals** and **objectives**.
- **OPM** is defined as a **framework** in which **portfolio**, **program**, and **project management** are **integrated** with **organizational** enablers in order to achieve **strategic objectives**.

## 1.2.3.6 ORGANIZATIONAL PROJECT MANAGEMENT (OPM) AND STRATEGIES

- The purpose of OPM is to ensure that the organization undertakes the right projects and allocates critical resources appropriately.
- OPM also helps to ensure that all levels in the organization understand the strategic vision, the initiatives that support the vision, the objectives, and the deliverables.

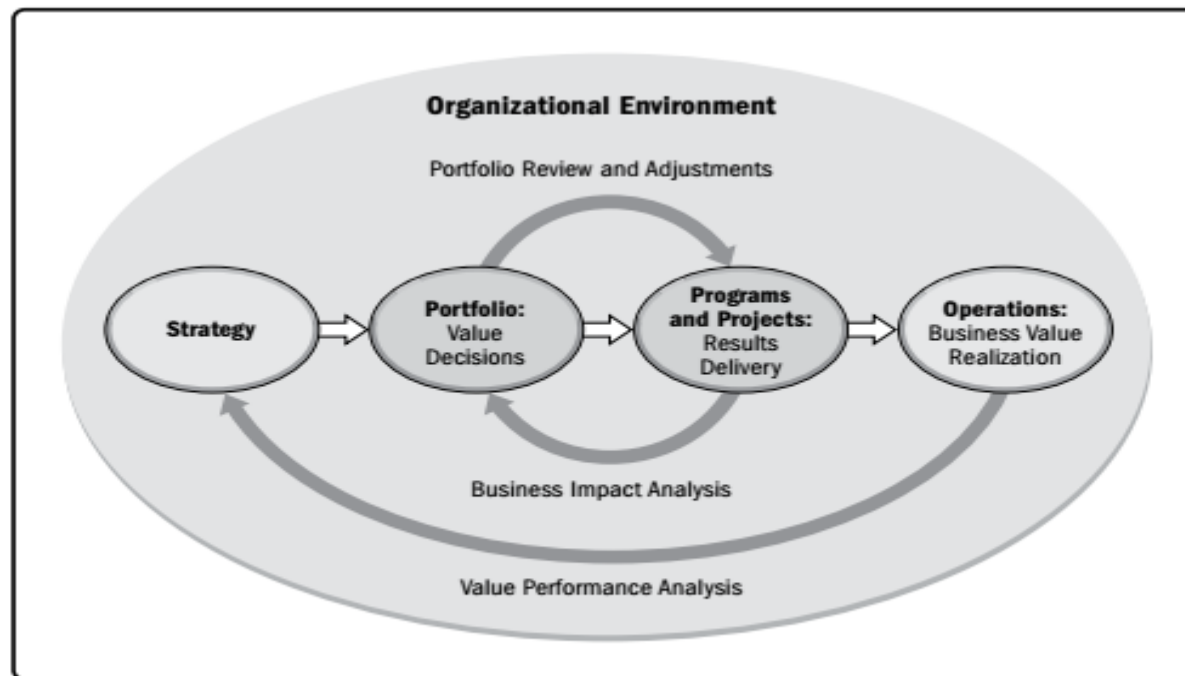


Figure 1-4. Organizational Project Management



## 1.2.4 COMPONENTS OF THE GUIDE

- The **key components** are described briefly in Table 1-3. These **components** are more **fully explained** in the sections that follow the table.

Table 1-3. Description of *PMBOK® Guide* Key Components

<i>PMBOK® Guide</i> Key Component	Brief Description
<b>Project life cycle (Section 1.2.4.1)</b>	The series of phases that a project passes through from its start to its completion.
<b>Project phase (Section 1.2.4.2)</b>	A collection of logically related project activities that culminates in the completion of one or more deliverables.
<b>Phase gate (Section 1.2.4.3)</b>	A review at the end of a phase in which a decision is made to continue to the next phase, to continue with modification, or to end a program or project.
<b>Project management processes (Section 1.2.4.4)</b>	A systematic series of activities directed toward causing an end result where one or more inputs will be acted upon to create one or more outputs.
<b>Project Management Process Group (Section 1.2.4.5)</b>	A logical grouping of project management inputs, tools and techniques, and outputs. The Project Management Process Groups include Initiating, Planning, Executing, Monitoring and Controlling, and Closing. Project Management Process Groups are not project phases.
<b>Project Management Knowledge Area (Section 1.2.4.6)</b>	An identified area of project management defined by its knowledge requirements and described in terms of its component processes, practices, inputs, outputs, tools, and techniques.

## 1.2.4 COMPONENTS OF THE GUIDE

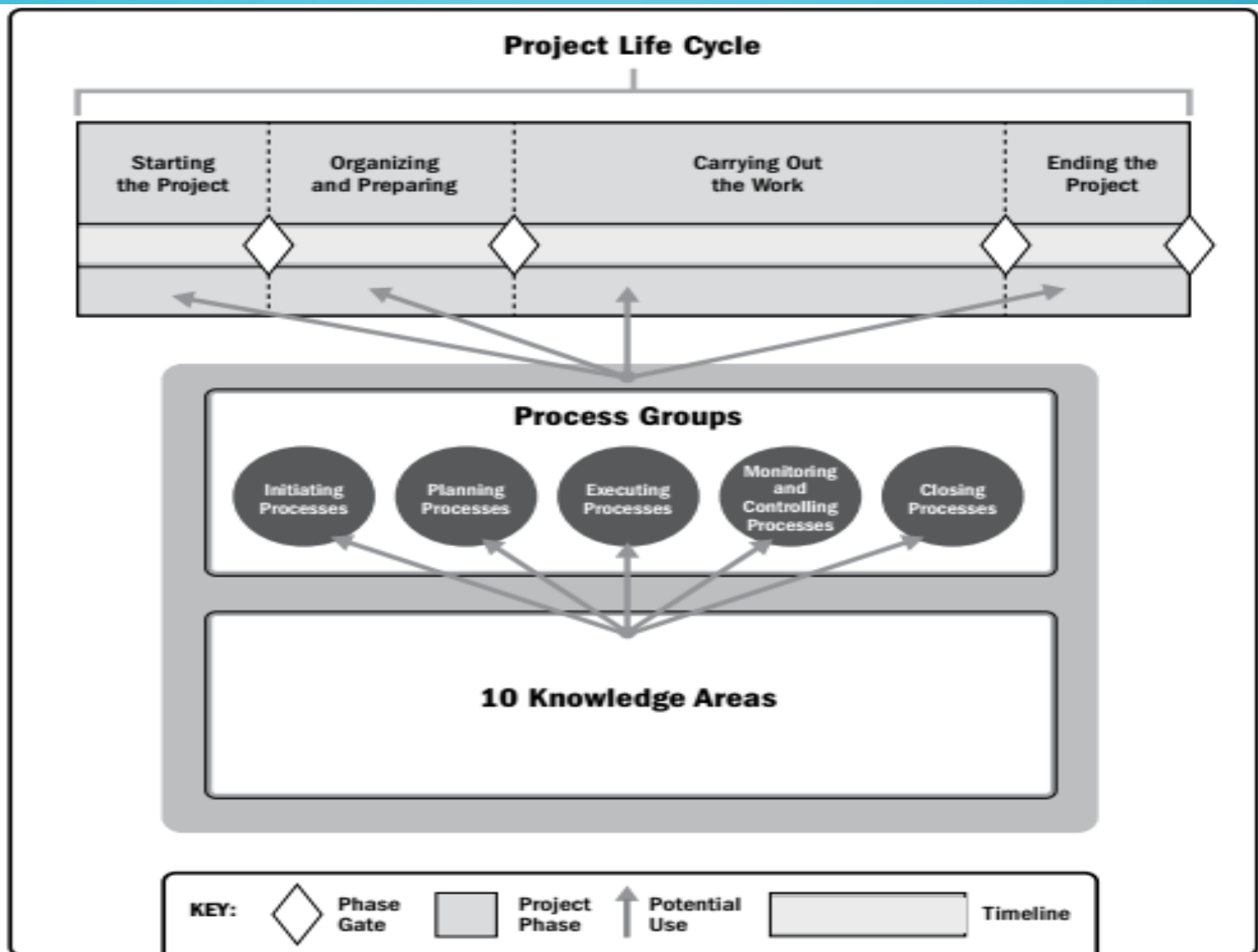


Figure 1-5. Interrelationship of *PMBOK® Guide* Key Components in Projects

## 1.2.4.1 PROJECT AND DEVELOPMENT LIFE CYCLES

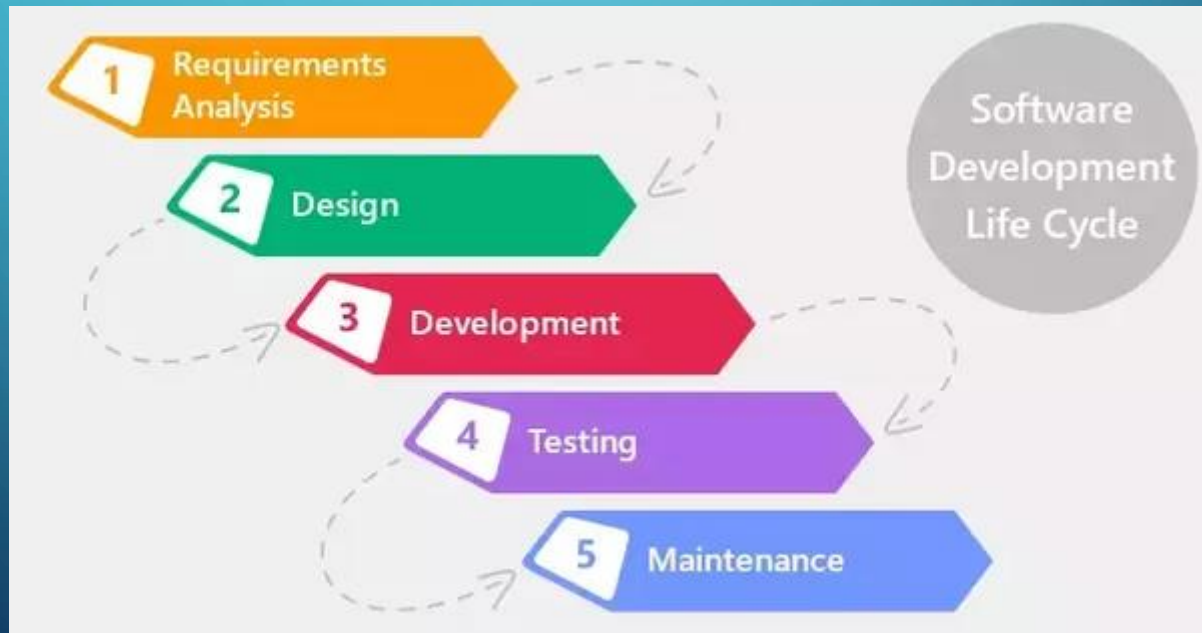
- A **project life cycle** is the series of **phases** that a project passes through from its **start** to its **completion**. The phases may be **sequential**, **iterative**, or **overlapping**. All projects can be mapped to the generic life cycle shown in Figure 1-5.
- **Development life cycles** can be **predictive**, **iterative**, **incremental**, **adaptive**, or a **hybrid** model:
  - In a **predictive life cycle**, the project **scope**, **time**, and **cost** are **determined** in the **early phases** of the **life cycle**. **Any changes** to the scope are **carefully managed**. Predictive life cycles may also be referred to as **waterfall life cycles**.
  - In **an iterative life cycle**, the project **scope** is generally **determined early** in the project life cycle, but **time** and **cost estimates** are **routinely modified** as the project team's **understanding** of the **product increases**. **Iterations** develop the product through a series of **repeated cycles**,

## 1.2.4.1 PROJECT AND DEVELOPMENT LIFE CYCLES

- **In an iterative life cycle** : Iterations develop the product through a series of repeated cycles, while increments successively add to the functionality of the product. In an incremental life cycle, the deliverable is produced through a series of iterations that successively add functionality within a predetermined time frame.
- **Adaptive life cycles** are agile, iterative, or incremental. The detailed scope is defined and approved before the start of an iteration. Adaptive life cycles are also referred to as agile or change-driven life cycles.
- **A hybrid life cycle** is a combination of a predictive and an adaptive life cycle. Those elements of the project that are well known or have fixed requirements follow a predictive development life cycle, and those elements that are still evolving follow an

## 1.2.4.1 PROJECT AND DEVELOPMENT LIFE CYCLES

- It is up to the project management team to determine the **best life cycle** for **each project**. The project life cycle needs to be **flexible** enough to deal with the **variety** of **factors** included in the project.
- A **product life cycle** is the series of **phases** that represent the **evolution** of a **product**, from **concept** through **delivery**, **growth**, **maturity**, and to **retirement**.



## 1.2.4.2 PROJECT PHASE

- **A project phase** is a collection of logically **related** project **activities** that culminates in the completion of **one** or **more deliverables**. The phases in a life cycle can be described by a variety of attributes.

**Attributes** may include but are not limited to:

- Name
- Number
- Duration
- Resource requirements
- Entrance criteria for a project to move into that phase, and Exit criteria for a project to complete a phase

**Examples of phase names** include but are not limited to:

- Concept development,
- Feasibility study,
- Customer requirements,
- Solution development,
- Design,
- Prototype,
- Build,
- Test

## 1.2.4.3 PHASE GATE

- **A phase gate**, is held at the **end** of a **phase**. The project's **performance** and **progress** are compared to **project** and **business documents** including but not limited to:

- **Project business case & Project charter & Project management plan & And Benefits management plan.**

**A decision (e.g., go/no-go decision) is made as a result of this comparison to:**

- **Continue to the next phase, Continue to the next phase with modification, End the project, Remain in the phase, or Repeat the phase** or elements of it.

- **phase gates** may be referred to by other terms such as, **phase review, stage gate, kill point, and phase entrance or phase exit**

## 1.2.4.4 PROJECT MANAGEMENT PROCESSES

- The project life cycle is managed by **executing** a **series** of project **management activities** known as project **management processes**.
- Every project management process produces **one or more outputs** from **one or more inputs** by using appropriate project management **tools** and **techniques**. The output can be a **deliverable** or an **outcome**. Outcomes are an end result of a process.

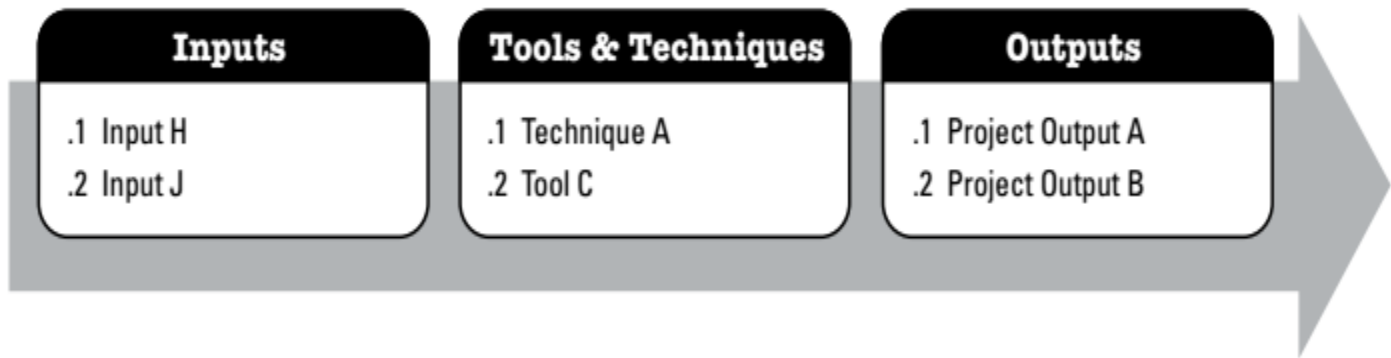


Figure 1-6. Example Process: Inputs, Tools & Techniques, and Outputs



## 1.2.4.4 PROJECT MANAGEMENT PROCESSES

- Processes generally fall into one of **three categories**:
  - **Processes used once or at predefined points in the project.** The processes *Develop Project Charter* and *Close Project or Phase* are examples.
  - **Processes that are performed periodically as needed.** The process *Acquire Resources* is performed as **resources are needed**. The process *Conduct Procurements* is performed prior to **needing** the **procured** item.
  - **Processes that are performed continuously throughout the project.** The process *Define Activities* may occur **throughout** the **project life cycle**, especially if the project uses **rolling wave planning** or an **adaptive development approach**. Many of the monitoring and control processes are ongoing from the start of the project, until it is closed out.

## 1.2.4.5 PROJECT MANAGEMENT PROCESS GROUPS

- A Project **Management Process Group** is a logical grouping of project management processes to achieve specific project objectives.
  - **Initiating Process Group.** Those processes performed to **define** a **new project** or a **new phase** of an existing project by obtaining **authorization** to **start** the **project** or phase.
  - **Planning Process Group.** Those processes required to **establish** the **scope** of the **project**, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve.
  - **Executing Process Group.** Those processes performed to **complete** the **work** defined in the **project management plan** to satisfy the project requirements.

## 1.2.4.5 PROJECT MANAGEMENT PROCESS GROUPS

- **Monitoring and Controlling Process Group.** Those processes required to **track, review, and regulate** the **progress** and **performance** of the project; identify any areas in which **changes** to the plan are required; and initiate the corresponding changes.
- **Closing Process Group.** Those processes performed to **formally complete or close** the **project**, phase, or contract.

## 1.2.4.6 PROJECT MANAGEMENT KNOWLEDGE AREAS

In addition to Process Groups, processes are also **categorized** by **Knowledge Areas**. A Knowledge Area is an identified area of project management defined by its **knowledge requirements** and described in terms of its component processes,

## 1.2.4.6 PROJECT MANAGEMENT KNOWLEDGE AREAS

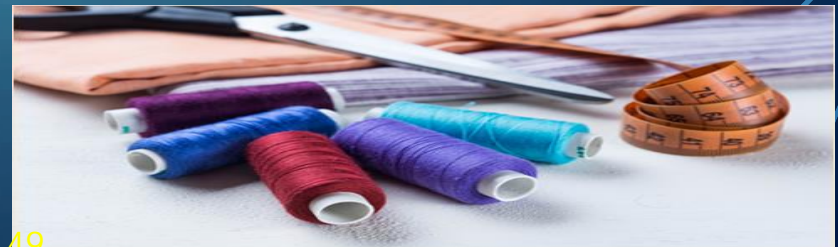
- **Project Integration Management**
- **Project Scope Management**
- **Project Schedule Management**
- **Project Cost Management**
- **Project Quality Management**
- **Project Resources Management**
- **Project Communications Management**
- **Project Risk Management**
- **Project Procurement Management**
- **Project Stakeholder Management**

## 1.2.4.7 PROJECT MANAGEMENT DATA AND INFORMATION

- Project data are regularly **collected** and **analyzed** throughout the **project life cycle**. The following definitions identify key terminology regarding project data and information:
  - **Work performance data**. The **raw observations** and **measurements** identified during activities performed to carry out the project work.
  - **Work performance information**. The performance data collected from various controlling processes, **analyzed** in **context** and **integrated** based on **relationships** across areas.
  - **Work performance reports**. The **physical** or **electronic representation** of **work performance information** compiled in project documents, which is intended to **generate decisions** or **raise issues**, actions, or awareness.

## 1.2.5 TAILORING

- Usually project managers apply a project management methodology to their work. A **methodology** is a **system** of **practices, techniques, procedures,** and **rules** used by those **who work** in a **discipline**. This definition makes it clear that this guide itself is not a methodology.
- The **appropriate project management processes, inputs, tools, techniques, outputs,** and **life cycle phases** should be **selected to manage a project** , This selection activity is known as **tailoring project management to the project**
- Tailoring is **necessary** because each project is **unique**; not every process, tool, technique, input, or output identified
- The importance of each **constraint** is **different for each project**, and the project **manager tailors** the **approach** for **managing** these **constraints** based on the project **environment**, organizational **culture**, stakeholder **needs**, and other variables



## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

- The project manager needs to ensure that the project management approach captures the intent of **business documents**. These documents are defined in Table. These two documents are interdependent and iteratively developed and maintained throughout the life cycle of the project.

**Table 1-5. Project Business Documents**

Project Business Documents	Definition
<b>Project business case</b>	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.
<b>Project benefits management plan</b>	The documented explanation defining the processes for creating, maximizing, and sustaining the benefits provided by a project.

## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

- Figure illustrates the **interrelationship** of these critical project management **business documents** and the needs assessment. Figure shows an approximation of the **life cycle** of these various **documents** against the project life cycle.

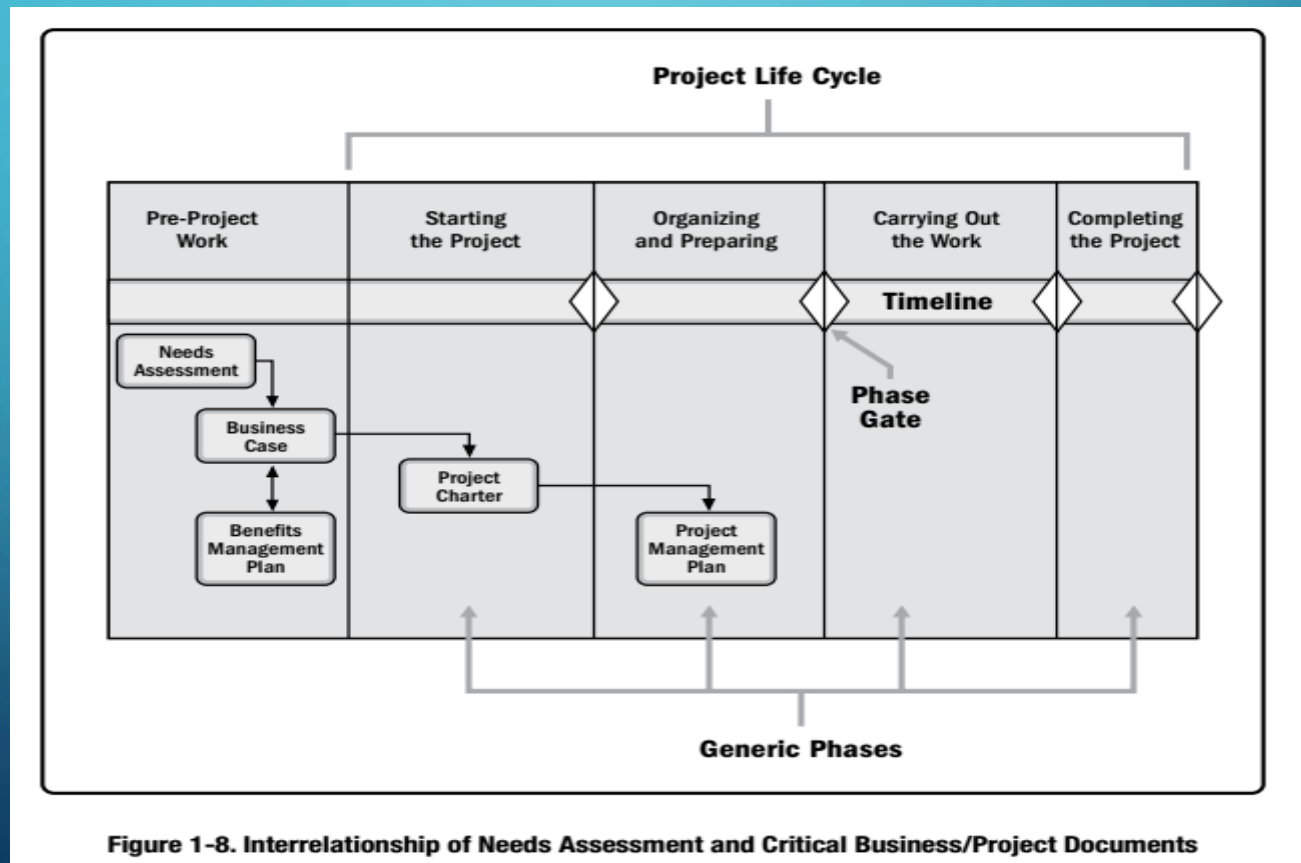


Figure 1-8. Interrelationship of Needs Assessment and Critical Business/Project Documents



## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### 1.2.6.1 PROJECT BUSINESS CASE:

- The project business case is 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**
- The business case lists the **objectives** and **reasons** for **project** initiation. It helps **measure** the **project success** at the **end** of the **project against** the **project objectives**.
- The **business case** may be used **before** the project **initiation** and may result in **a go/no-go decision for the project**.
- A needs assessment often precedes the business case. The needs assessment involves understanding business goals and objectives, issues, and opportunities and recommending proposals to address them. **The results of**

## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### ■ 1.2.6.1 PROJECT BUSINESS CASE:

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

- **BUSINESS NEEDS:**

- Determination of what is prompting the need for action;
- Situational statement documenting the **business problem** or **opportunity** to be **addressed** including the value to be delivered to the organization;
- Identification of **stakeholders affected**; and
- Identification of the **scope**.

## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### ■ 1.2.6.1 PROJECT BUSINESS CASE:

#### ■ ANALYSIS OF THE SITUATION:

- Identification of **organizational strategies, goals, and objectives**;
- Identification of **root cause(s)** of the **problem** or main contributors of an opportunity;
- Gap analysis of **capabilities needed** for the project **versus existing capabilities** of the organization;
- Identification of **known risks**;
- Identification of **critical success factors**;
- Identification of **decision criteria** by which the various courses of action may be assessed;

## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### 1.2.6.2 PROJECT BENEFITS MANAGEMENT PLAN

- The project benefits management plan is the **document** that describes how and when the **benefits** of the project will be delivered, and describes the mechanisms that should be in place to **measure** those **benefits**. The benefits management plan describes **key elements** of the **benefits** and may include but is not limited to documenting the following:
  - **Target benefits** (e.g., the expected tangible and intangible value to be gained by the implementation of the project; **financial value** is expressed **as net present value**);
  - **Strategic alignment** (e.g. how well the **project benefits align** to the **business strategies** of the **organization**);
  - **Timeframe for realizing benefits** (e.g., benefits by **phase, short-term, long-term**, and ongoing);

## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### 1.2.6.2 PROJECT BENEFITS MANAGEMENT PLAN

- **Benefits owner** (e.g., the accountable person to monitor, record, and report realized benefits throughout the timeframe established in the plan);
- **Metrics** (e.g., the measures to be used to show benefits realized, direct measures, and indirect measures);
- **Assumptions** (e.g., factors expected to be in place or to be in evidence);  
and
- **Risks** (e.g., risks for realization of benefits)

### 1.2.6.3 PROJECT CHARTER AND PROJECT MANAGEMENT PLAN

- The project charter is defined as a document issued by the project sponsor that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.

## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### 1.2.6.4 PROJECT SUCCESS MEASURES

- One of the most common challenges in project management is determining whether **or not** a **project** is **successful**.
- **Traditionally**, the project management **metrics** of **time**, **cost**, **scope**, and **quality** have been the most important factors in defining the success of a project. More recently, practitioners and scholars have determined that project success should also be measured with consideration toward achievement of the project objectives.
- Project success may include **additional criteria** linked to the organizational strategy and to the delivery of business results.



## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### 1.2.6.4 PROJECT SUCCESS MEASURES

- These project objectives may include but are not limited to:
  - Completing the project **benefits management plan**;
  - Meeting the agreed-upon **financial measures** documented in the business case. These **financial measures** may include but are not limited to:
    - Net present value (**NPV**), Return on investment (**ROI**), Internal rate of return (**IRR**), Payback period (**PBP**), and Benefit-cost ratio (**BCR**)
    - Meeting **business case nonfinancial** objectives;
    - Completing movement of an **organization** from its **current state** to the desired **future state**;
    - Fulfilling contract terms and conditions;

## 1.2.6 PROJECT MANAGEMENT BUSINESS DOCUMENTS

### 1.2.6.4 PROJECT SUCCESS MEASURES

- When the business alignment for a project is constant, the chance for project success greatly increases because the project remains aligned with the strategic direction of the organization.
- It is possible for a project to be **successful** from a **scope/schedule/budget viewpoint**, and to be **unsuccessful** from a **business viewpoint**. This can occur when there is a change in the business needs or the market environment before the project is completed





