

**Summary of Project
Management Body of
Knowledge
PMBOK⁷**

Nasergy

Mohamed Naser

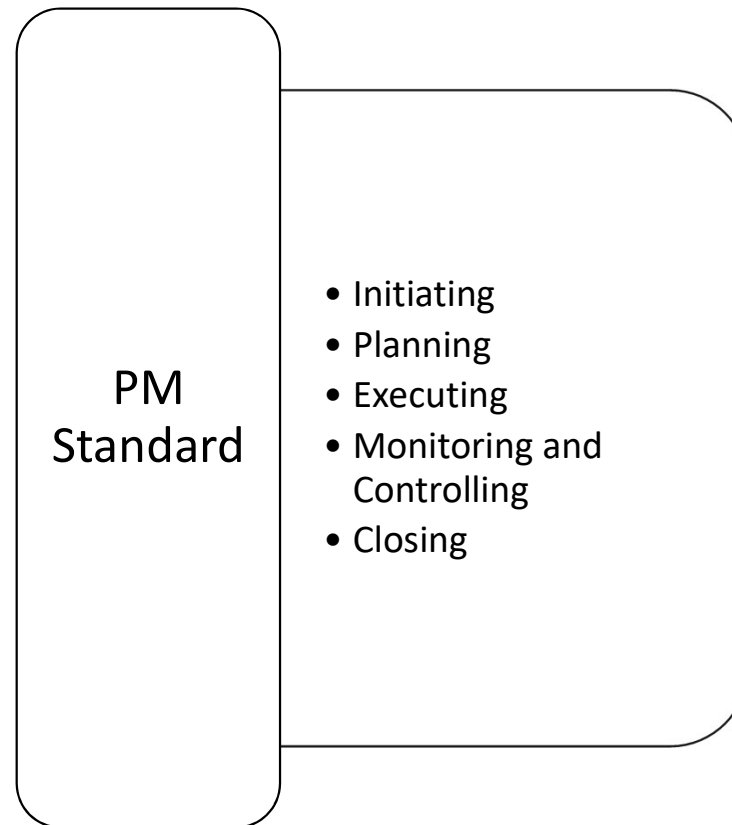
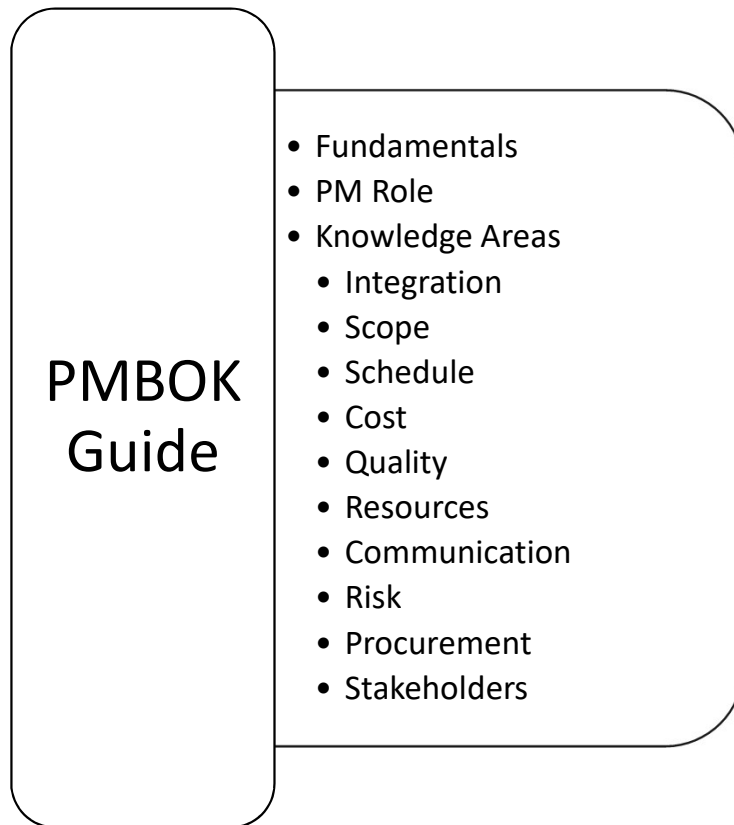
2021-2022



The Standard for Project Management

**A Guide to The
Project Management
Body of Knowledge**

PMBOK6



PMBOK7

PMBOK Guide

- Performance Domains
 - Stakeholders performance
 - Team performance
 - Development Approach
 - Planning performance
 - Work performance
 - Delivery performance
 - Measurement performance
 - Uncertain performance
- Tailoring
- Models & Methods & Artifacts.

PM Standard

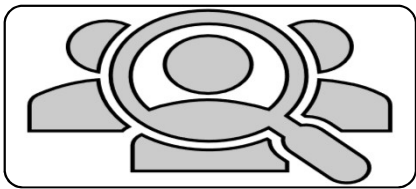
- Introduction
- System for value delivery
- Principles
 - Stewardship
 - Team
 - Stakeholders
 - Value
 - System Thinking
 - Leadership
 - Tailoring
 - Quality
 - Complexity
 - Risk
 - Adaptability
 - Change

PMBOK7

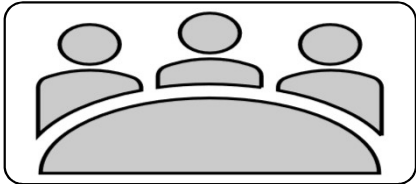
The Standard for Project Management



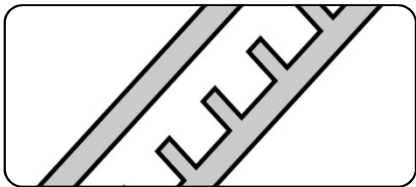
The Standard for Project Management



1-Introduction



2- System for value delivery



3- Project Management Principles

1. Introduction

1. Purpose

2. Terms and Concepts

3. Audience for This Standard

The Standard for Project Management

1. Introduction

1. Purpose

- It provides a basis for understanding the project management and how it enables intended outcomes.
- This standard applies regardless of industry, location, size, or delivery approach.
- It describes the system within which projects operate.
- This system includes the governance, functions, environment, consideration for the relationship between project management and product management.

The Standard for Project Management

1. Introduction

2. Terms and Concepts

- Outcome: an end result of a process or project.
- Portfolio: projects, programs, subsidiary portfolios, and operations managed as a group to achieve strategic objectives.
- Product: An artifact that is produced and can be either an end item in itself or a component item.
- Program: Related projects, subsidiary programs that are managed in a coordinated manner to obtain benefits not available from managing them individually.
- Project: A temporary endeavor undertaken to create a unique products, service, or result.

The Standard for Project Management

1. Introduction

2. Terms and Concepts

- **Project management:** The application of knowledge, skills, tools, and techniques to project activities to meet project requirements.
- **Project manager:** The person assigned by the performing organization to lead the project team that is responsible for achieving the project objectives.
- **Project team:** A set of individuals performing the work of the project to achieve its objectives.
- **System for value delivery:** A collection of strategic business activities aimed at building, sustaining and/or advancing an organization.

The Standard for Project Management

1. Introduction

2. Terms and Concepts

- **Value:** The worth, importance, or usefulness of something. Different stakeholders perceive value in different ways.
 - Customers can define value as the ability to use specific features of a product.
 - Organizations can focus on business value as determined with financial metric (Such as income-cost or ROI).
 - Social value can include the contribution to groups of people or to the environment.

The Standard for Project Management

1. Introduction

3. Audience For This Standard

- This standard is for
 - Project practitioners – Consultants - Educators – Students - Sponsor – Vendors - Stakeholders
- Who
 - Responsible for delivering projects
 - Work in projects full time or part time
 - Work in programs or portfolios, or PMOs
 - Provide resources for project work.
 - Involved in product ownership & product management.
 - Focus on delivering value.
 - Teach or study project management.

2. A System for Value Delivery

1. Creating Value
2. Org. Governance Systems
3. Functions Associated with Projects
4. The Project Environment
5. Product Management Considerations

The Standard for Project Management

2. A System for Value Delivery

1. Creating Value

- Introduction
- Value delivery components
- Information flow

The Standard for Project Management

2. A System for Value Delivery

1. Creating Value

- **Introduction**

- Examples:

- Creating a new product, service, or result.
- Creating positive social contributions.
- Improving efficiency or productivity.
- Enabling changes to an organization.
- Sustaining benefits enabled by previous projects.

The Standard for Project Management

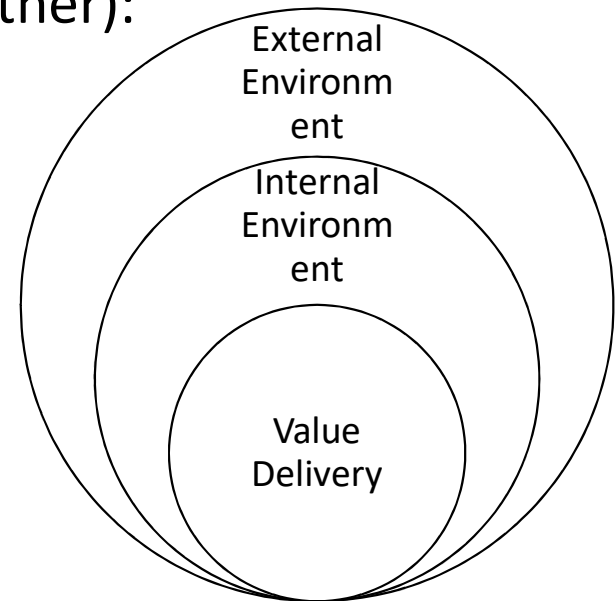
2. A System for Value Delivery

1. Creating Value

- **Value delivery components**

- For organizations, these elements can be considered as value delivery components (individuals or together):

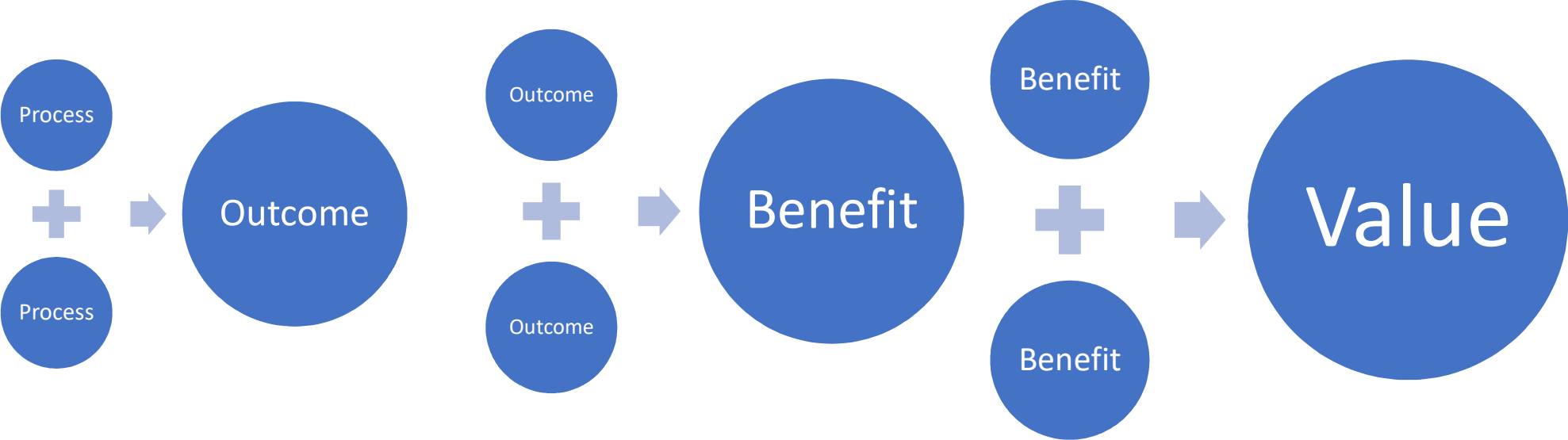
- Projects
- Programs
- Portfolios
- Operations



The Standard for Project Management

2. A System for Value Delivery

1. Creating Value



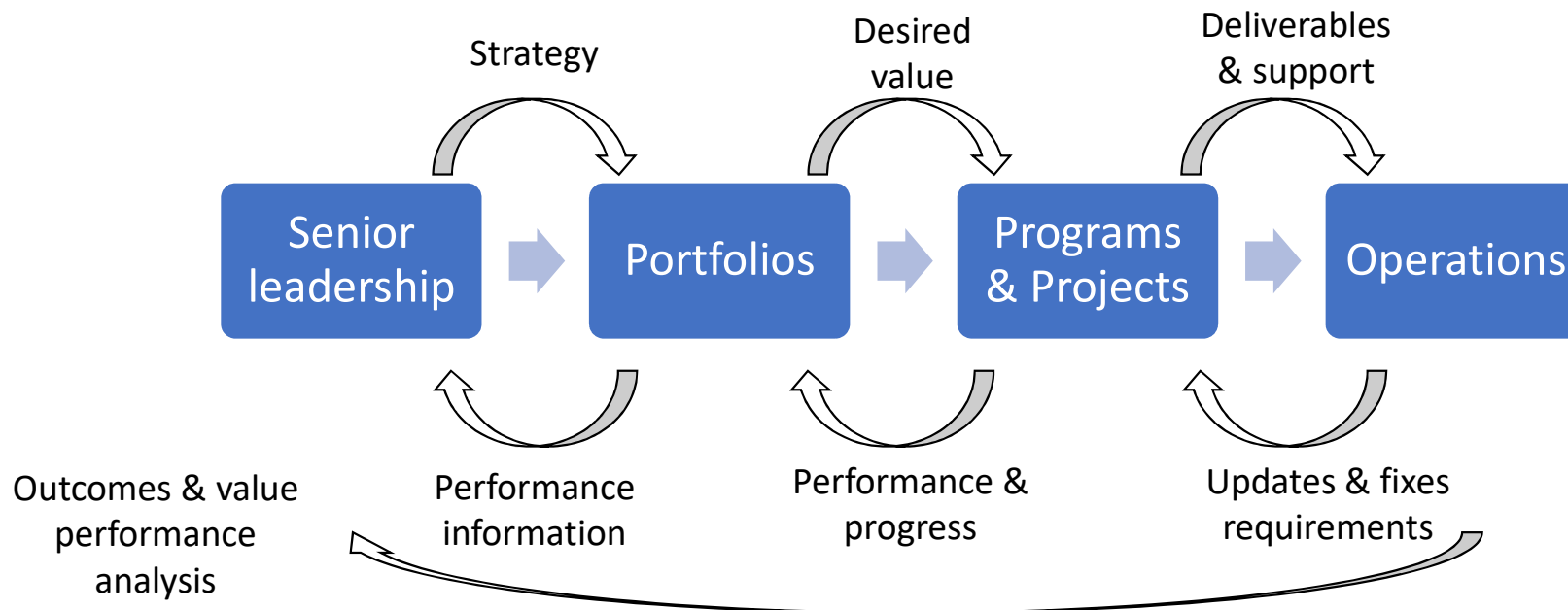
The Standard for Project Management

2. A System for Value Delivery

1. Creating Value

- **Information Flow**

- A value delivery system works effectively when information and feedback are shared among all components consistently.



The Standard for Project Management

2. A System for Value Delivery

2. Organization Governance Systems

- The governance system provides a framework with functions and processes that guide activities.
- It works with the value delivery system to enable smooth workflow and manage issues.
- It provides an integrated structure for evaluating changes, issues, and risks. This includes portfolio objectives, programs benefits and project deliverables.

The Standard for Project Management

2. A System for Value Delivery

3. Functions Associated with Projects

- Introduction
 - People drive project delivery by fulfilling necessary for functions for the project to run effectively and efficiently.
 - These functions can be done by one persons or by a group.
 - Coordination can be centralized or decentralized.
 - The followings topics are examples of functions that are often found on projects:

The Standard for Project Management

2. A System for Value Delivery

3. Functions Associated with Projects

- Providing oversight and coordination.
- Present objectives and feedback.
- Facilitate and support.
- Perform work and contribute insights.
- Apply expertise.
- Provide business direction and insight.
- Provide resources and direction.
- Maintain governance.

The Standard for Project Management

2. A System for Value Delivery

4. The Project Environment

- Introduction
 - Project exist and operate within internal and external environments that have influence on value delivery.
 - Those factors can be internal or external to the organization.
 - It can have favorable, unfavorable, or neutral impact on projects.

The Standard for Project Management

2. A System for Value Delivery

4. The Project Environment

- Internal environment.
 - Process & data & knowledge assets
 - Organization culture
 - Geographic distribution of facilities
 - Employees capability
- External environment.

The Standard for Project Management

2. A System for Value Delivery

4. The Project Environment

- External environment.
 - Market conditions.
 - Regulations and rules.
 - Industry standards.
 - Economic and financial consideration.
 - Political and social conditions.

The Standard for Project Management

2. A System for Value Delivery

5. Product Management Considerations

- Product is an artifact that is produced to be an end item itself or a component item.
- Product management involves the integration of people, data, processes and business system to create and maintain a product or service throughout its life cycle.
- Product life cycle is a series of phases that represents the evolution of a product from introduction, growth, maturity, to retirement.

The Standard for Project Management

2. A System for Value Delivery

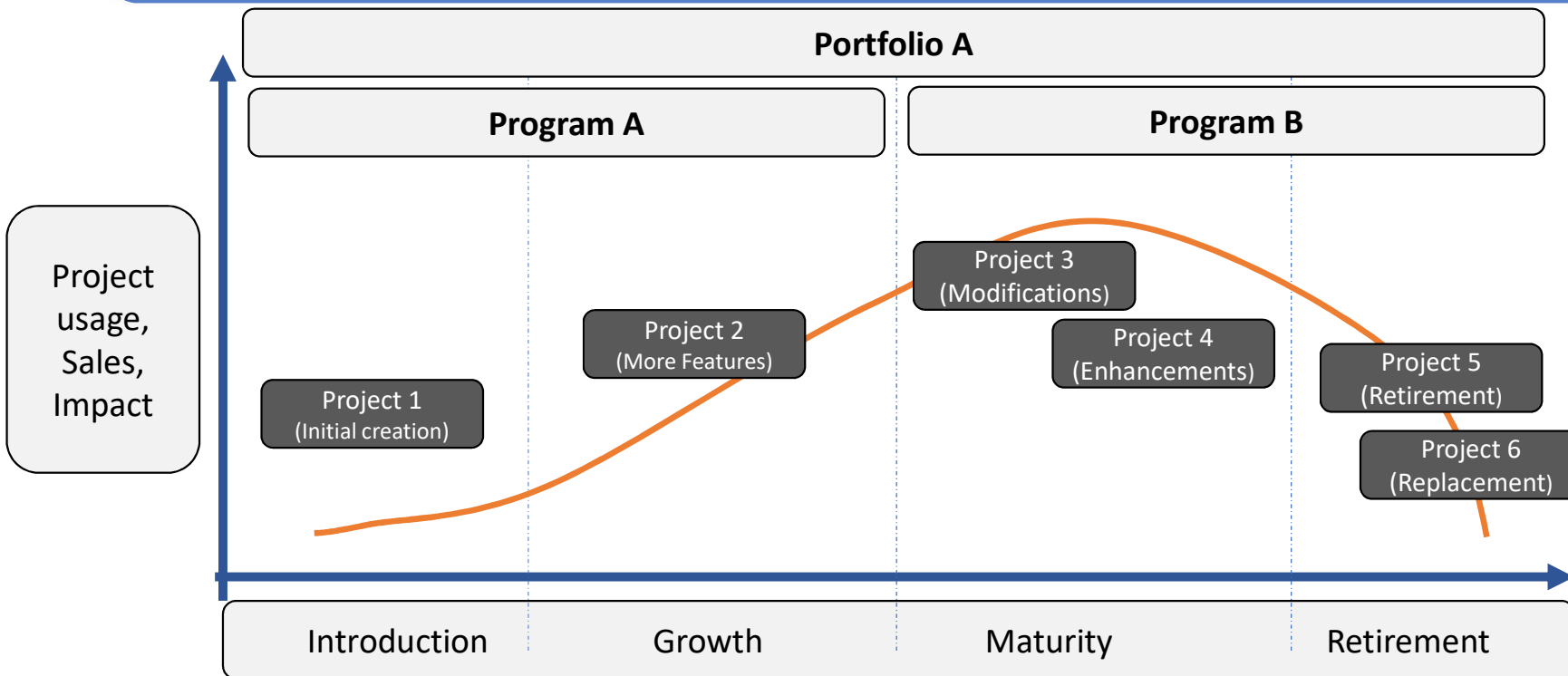
5. Product Management Considerations

- Portfolio, program, project, and product management are becoming interlinked.
- Portfolio, program, and product management are beyond the scope of this standard, but understanding the relationships between them provides a useful understanding of the project you manage.
- Product management may initiate programs or projects at any point in the product life cycle to create or enhance a specific components of the product.

The Standard for Project Management

2. A System for Value Delivery

5. Product Management Considerations



The Standard for Project Management

2. A System for Value Delivery

5. Product Management Considerations

- Product management can exist in different forms:
 - Program management within a product life cycle.
 - Project management within a product life cycle.

3. Project Management Principles

1. Be a diligent Steward
2. Create a project team environment
3. Engage with stakeholders
4. Focus on value
5. Response to system interactions
6. Demonstrate leadership behaviors
7. Tailor based on context
8. Build Quality into processes
9. Navigate Complexity
10. Optimize Risk Responses
11. Embrace Adaptability and Resiliency
12. Enable Changes

The Standard for Project Management

3. Project Management Principles

1. Be a diligent steward

- Steward encompasses responsibilities within and external to the organization
- It includes:
 - Integrity
 - Care
 - Trustworthiness
 - Compliance
- It considers:
 - Financial, social, technical, and environmental awareness.

The Standard for Project Management

3. Project Management Principles

2. Create a collaboration team environment

- Projects are delivered by project teams.
- Project teams often establish their own local culture.
- A collaborative project team environment facilitates:
 - Alignment with other organizations cultures.
 - Team learning and development.
 - Optimal contributions to deliver the desired outcomes.

The Standard for Project Management

3. Project Management Principles

3. Engage with stakeholders

- Stakeholders influence projects, performance, and outcomes.
- Project teams serve other stakeholders by engaging with them.
- Stakeholder engagement proactively and to the degree needed advances value delivery.

The Standard for Project Management

3. Project Management Principles

4. Focus on Value

- Value is the ultimate indicator of project success.
- Value can be realized throughout the project, at the end, or even after the project is complete.
- Value can be defined in quantitative or qualitative terms.
- A focus on outcomes allows project teams to support the intended benefits that lead to value creation.
- Project teams evaluate progress and adapt to maximize the expected value.

The Standard for Project Management

3. Project Management Principles

5. Recognize, Evaluate, and Response to system Interactions

- Recognize, evaluate, and respond to the dynamic circumstances within the project in a holistic way to positively affect project performance.
- A project is a system of interdependent and interacting domains of activity.
- Systems thinking entails taking a holistic view of how project parts interact with each other and with external systems.
- Being responsive to system interactions allows project teams to leverage positive outcomes.

The Standard for Project Management

3. Project Management Principles

6. Demonstrate Leadership Behaviors

- Effective leadership promotes project success and lead to positive outcomes.
- Leadership can be implemented by the project manager or any team member.
- Leadership is different than authority.
- Effective leaders adapt their leader style to the situation.
- Effective leaders use different motivation techniques among team members.
- Leaders demonstrate desired behavior in areas of honesty and ethical conduct.

The Standard for Project Management

3. Project Management Principles

7. Tailor Based on Context

- Each project is unique.
- Project success is based on adapting to the unique context of the project to determine the most appropriate methods to produce outcomes.
- Tailoring the approach is iterative and continuous process throughout the project.
- Design the project development approach based on the context of the project and the environment using “just enough” process to achieve the desired outcome.

The Standard for Project Management

3. Project Management Principles

8. Build Quality Into Processes and Deliverables

- Project quality entails satisfying stakeholders' expectations and fulfilling project and product requirements.
- Quality focuses on meeting acceptance criteria for deliverables.
- Project quality entails ensure project processes are appropriate and as effective as possible.

The Standard for Project Management

3. Project Management Principles

9. Navigate Complexity

- Complexity is the result of human behavior, system interactions, uncertainty, and ambiguity.
- Complexity can emerge at any point during the project.
- Complexity can lead to events or conditions that affect value, scope, communications, stakeholders, risk.
- Project teams can stay vigilant in identifying elements of complexity and use a variety of methods to reduce the amount or impact of complexity.

The Standard for Project Management

3. Project Management Principles

10. Optimize Risk Responses

- Individual and overall risks can impact projects.
- Risks can be positive or negative (opportunities or threats).
- Risk are addressed continually throughout the project.
- An organization's risk attitude, appetite, and threshold influence how risk is addressed.
- Risk responses should be:
 - Cost effective
 - Realistic within the project context.
 - Agreed to by relevant stakeholders.
 - Owned by responsible person.

The Standard for Project Management

3. Project Management Principles

11. Embrace Adaptability and Resiliency

- Adaptability is the ability to respond to changing conditions.
- Resiliency is the ability to absorb impacts and to recover quickly from a setback or failure
- A focus on outcomes rather than outputs facilitates adaptability.
- Build adaptability and resiliency into the organization's & team's approaches to help the project accommodate change, recover from setbacks, and advance the work of the project.

The Standard for Project Management

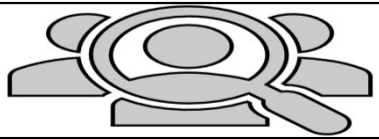
3. Project Management Principles

12. Enable Changes

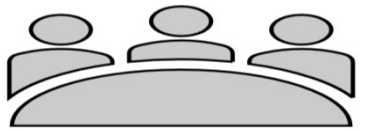
- A structured approach to change helps individuals or groups transition from the current state to a future desired state.
- Change can originate from the internal influences or external sources.
- Enabling change can be challenging as not all stakeholders embrace change.
- Attempting too much change in a short time can lead to change fatigue / resistance.
- Stakeholder engagement and motivational approaches assist in change adoption.

A Guide to The Project Management Body of Knowledge

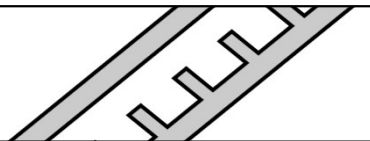
A Guide to The Project Management Body of Knowledge



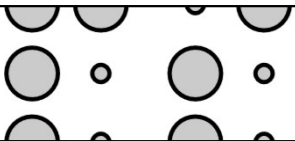
1-Introduction



2- Project Performance Domains



3- Tailoring



4- Models, Methods, and Artifacts

The PMBOK GUIDE

1. Introduction

1. Introduction

1. Structure of the PMBOK

2. Relationship of the PMBOK & PM Standard

3. Changes to the PMBOK

The PMBOK GUIDE

1. Introduction

1. Structure of the PMBOK

1. Project performance domains.
2. Tailoring.
3. Models, methods, and artifacts.

The PMBOK GUIDE

1. Introduction

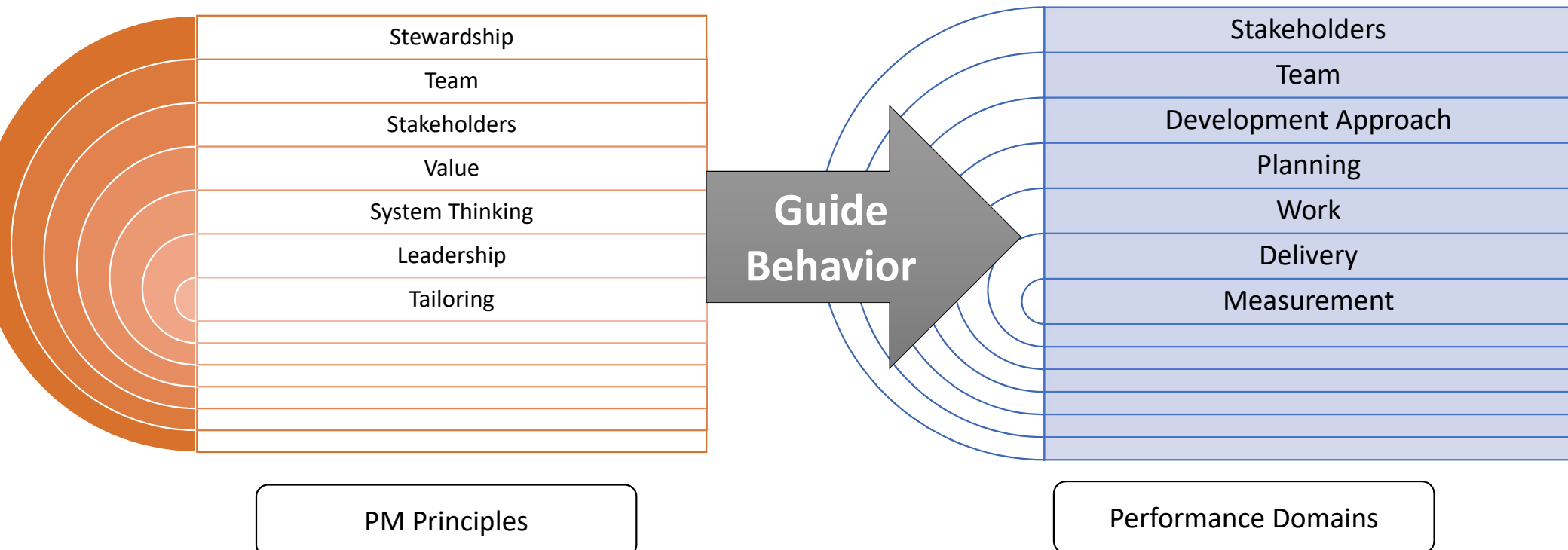
2. Relationship of the PMBOK & PM Standard

1. Project management principles guide the project performance domains.
2. Principle is a fundamental norm, truth, or value.
3. They provide guidance for the behavior of people involved in project.
4. Therefore, principles guides behavior of the domains and domains broad areas of focus in which to demonstrate that behavior.

The PMBOK GUIDE

1. Introduction

2. Relationship of the PMBOK & PM Standard



The PMBOK GUIDE

1. Introduction

3. Changes to the PMBOK

1. This edition of PMBOK guide focuses on delivering outcomes regardless of the approach used by the project team.
2. This edition is different from the inputs, tools, and outputs (ITTO).
3. The current edition has a shift from process-based to one based on principles.
4. The project performance domains represent a group of related activities that are critical for the effective delivery of project outcomes.
5. There are 8 project performance domains in this guide.

The PMBOK GUIDE

1. Introduction

3. Changes to the PMBOK

6. Tailoring is the adaptation of the project management approach and processes to make them more suitable for the given environment and the work at hand.
7. The tailoring process is driven by the guiding principles, value and organizational culture.
8. Since no publication can capture every tool & technique, therefore, this edition presents an array of commonly used models, methods, and artifacts that project practitioners can use to accomplish their work.

The PMBOK GUIDE

2. Project Performance Domains

2. Project Performance Domains

1. Stakeholders performance
2. Team performance
3. Development Approach
4. Planning performance
5. Work performance
6. Delivery performance
7. Measurement performance
8. Uncertain performance

The PMBOK GUIDE

2. Project Performance Domains

1. Stakeholder Performance Domain

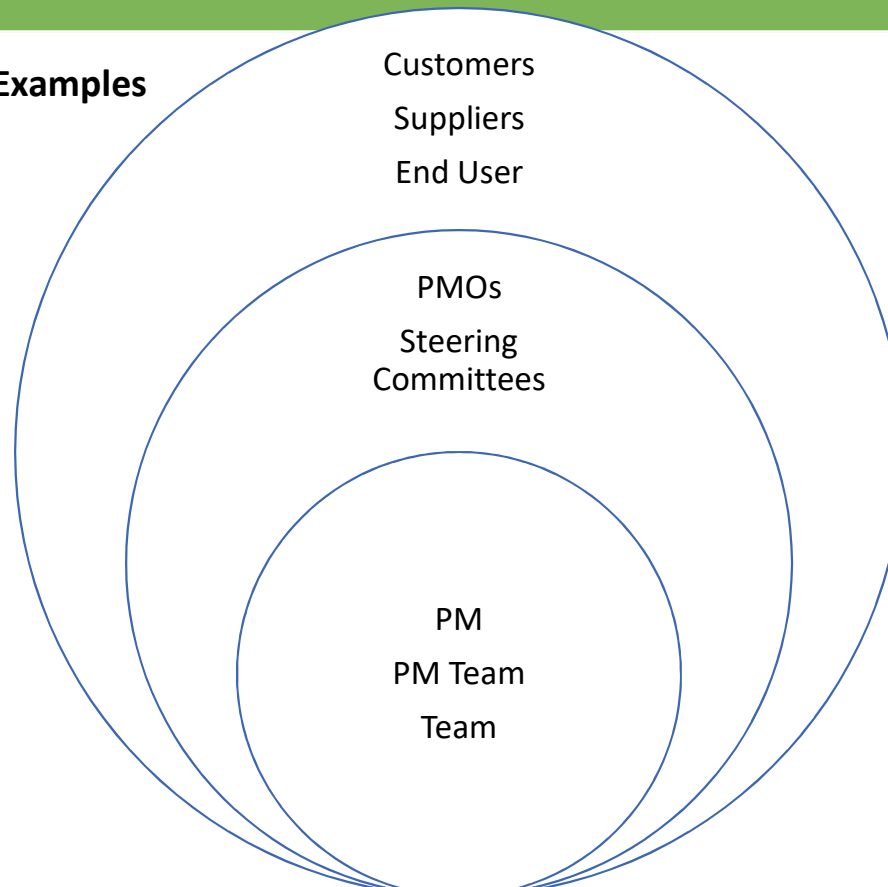
- This domain addresses activities and functions associated with stakeholders.
- Outcomes
 - A Productive working relationship with stakeholders throughout the project
 - Stakeholder agreement with project objectives.
 - Stakeholder who are project beneficiaries are supportive and satisfied while stakeholders who may oppose the project don't negatively impact the project outcomes.

The PMBOK GUIDE

2. Project Performance Domains

1. Stakeholder Performance Domain

Project Stakeholders Examples

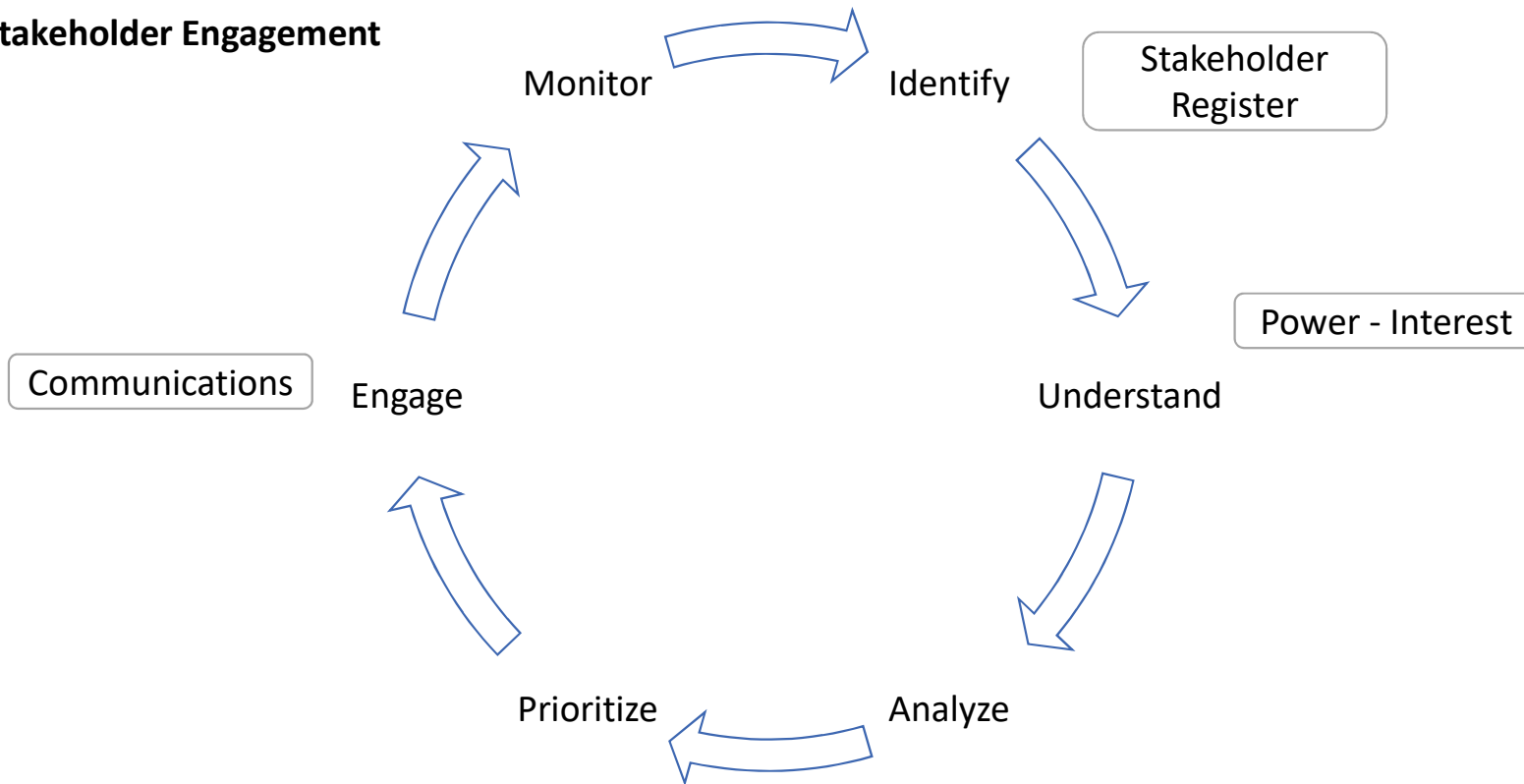


The PMBOK GUIDE

2. Project Performance Domains

1. Stakeholder Performance Domain

Stakeholder Engagement



The PMBOK GUIDE

2. Project Performance Domains

1. Stakeholder Performance Domain

KPIs

Sr	Outcomes	KPIs
1	A Productive working relationship with stakeholders throughout the project	Observation
2	Stakeholder agreement with project objectives.	Number of changes or modifications.
3	Stakeholder who are project beneficiaries are supportive and satisfied while stakeholders who may oppose the project don't negatively impact the project outcomes.	Surveys, Interviews, and focus groups.

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

- This domain addresses activities and functions associated with the people who are responsible for producing project deliverables that realize business outcome.
- Outcomes:
 - Shared ownership
 - A High performance team
 - Applicable leadership and other interpersonal skills demonstrated by all team members.

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

1. Project team management and leadership
2. Project team culture
3. High Performance project teams
4. Leadership skills
5. Tailoring leadership styles

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

1. Project team management and leadership

- Centralized management and leadership
 - Accountability is assigned to one individual such as PM.
- Distributed management and leadership
 - Someone within the team members may serve as facilitator to enable communication, collaboration.
 - Servant leadership is a style of leadership focuses on understanding the needs of project team in order to enable the highest project team performance. Servant leadership behaviors include:
 - Obstacle removal
 - Diversion shield
 - development opportunities

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

1. Project team management and leadership

- Common aspects of team development
 - Vision and objectives
 - Roles and responsibilities
 - Project team operations (communication and problem solving)
 - Guidance
 - Growth

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

2. Project Team Culture

- Project manager is key in establishing a safe and respectful environment that allows the project team to communicate openly. One way to accomplish this is by modeling desired behaviors such as:
 - Transparency – Integrity – Respect – Positive discourse (presenting opportunity to have a dialogue rather than a debate) – Support – Courage (recommending a new approach to a problem or working way) – Celebrating success.

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

3. High Performance Project Teams

- Factors associate with creating of high performance teams:
 - Open Communication – Shared Understanding (of project purpose) – Shared Ownership (ownership of the outcomes) – Trust – Collaboration – Adaptability (flexibility) – Resilience (quick recovery) – Empowerment (power to make decisions) – Recognition.

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

4. Leadership skills

- Some traits and activities associated with leadership:
 - Establishing and maintain vision.
 - Critical thinking
 - Motivation
 - Factors (achievement – challenge – making a difference – autonomy – responsibility)
 - Interpersonal skills
 - Emotional intelligence
 - Self awareness (how do you affect the team) – self management (think before you act)– social awareness (be empathetic – employ active listening) – social skill (stablish rapport- build effective teams – manage attitude).
 - Decision making
 - Conflict management
 - Keep communications open and respectful – focus on the issues not the people – focus on the present and future not the past – search for alternative together.

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

5. Tailoring Leadership Style

You don't need to use all the leadership styles, you may need to tailor them based on:

- Project type
- Team maturity
- Organizational structure
- Location of project teams

The PMBOK GUIDE

2. Project Performance Domains

2. Team Performance Domain

KPIs

Sr	Outcomes	KPIs
1	Shared ownership	All project team members know the vision and objectives. The project team owns the deliverables of the project.
2	A High performance team	The project team trusts each other. The project team adapts to changing situations. The project team feels empowered and empower others.
3	Applicable leadership and other interpersonal skills demonstrated by all team members.	The project team members apply critical thinking and interposal skills. The project team members leadership styles are appropriate to the project environment.

The PMBOK GUIDE

2. Project Performance Domains

3. Development Approach

- Important definitions:
 - Deliverable: Any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project.
 - Development Approach: a method used to create and evolve the product, service, or result during the project life cycle, such as predictive, iterative, incremental, adaptive, or hybrid method.
 - Cadence: a rhythm of activities conducted throughout the project.
 - Project Phase: A collection of logically related project activities that culminates in the completion of one or more deliverables.
 - Project Life Cycle: The series of phases that a project passes through from its start to its completion.

The PMBOK GUIDE

2. Project Performance Domains

3. Development Approach

- Delivery Cadence:
 - Single delivery
 - Multiple deliveries
 - Periodic deliveries
 - Continuous deliveries (incremental delivery)
- Consideration for selecting a development approach:
 - Product, service, or result
 - Degree of innovation – requirement – scope- delivery options- risk.
 - Project
 - Stakeholders- schedule constraints- funding availability.
 - Organization
 - Org. structure- culture- team size and location- org. capability.

The PMBOK GUIDE

2. Project Performance Domains

3. Development Approach

- Life Cycle and phase definitions:
 - Feasibility: determines if the business case is valid.
 - Design: planning and analysis lead to the design of the project deliverables.
 - Build: Construction of the deliverables with integrated quality assurance.
 - Test: Final quality review and inspection of deliverables before go-live.
 - Deploy: Project deliverables are put into use and transitional activities required for sustainment are completed.
 - Close: The project is closed, project artifacts are achieved, team is released, and contracts are closed.

The PMBOK GUIDE

2. Project Performance Domains

3. Development Approach

- Examples:

Deliverable	Delivery Cadence	Development Approach
Building	Single Delivery	Predictive
Providing Services	Multiple Deliverables	Iterative
Website	Periodic Deliverables	Adaptive
Providing Trainings	Multiple Deliverables	Incremental

The PMBOK GUIDE

2. Project Performance Domains

3. Development Approach

KPIs

Sr	Outcomes	KPIs
1	Development approach that are consistent with project deliverables.	The development approach for deliverables reflects the product variables.
2	A project life cycle consisting of phases that connect the delivery of business and stakeholder value from the beginning to the end of the project.	Project work from launch to close is represented in the project phases.
3	Project life cycle phases that facilitate the delivery cadence and development approach required to produce the project deliverables.	The cadence for development, testing, and deploying is represented in the life cycle phases. Projects with multiple deliverables that have different delivery cadences and development methods are represented by overlapping phases as necessary.

The PMBOK GUIDE

2. Project Performance Domains

4. Planning Performance

- Important definition:
 - Estimate: A quantitative assessment of the likely amount of outcome.
 - Accuracy: It is an assessment of correctness.
 - Precision: It is an assessment of exactness.
 - Crashing: A method used to shorten the schedule duration for the least incremental cost by adding resources.
 - Fast Track: A Schedule compression method in which activities are performed in parallel or overlapped.
 - Budget: The approved estimate for the project or any work breakdown structure (WBS) or any schedule activity.

The PMBOK GUIDE

2. Project Performance Domains

4. Planning Performance

- Delivery

Predictive	Iterative & Incremental
Understand the business case Scope Breakdown (WBS)	High level themes (EPICS) Features User stories

- Estimating

- Features (Range {ROM-Budget estimate- Definitive estimate}- Accuracy- Precision- Confidence)

The PMBOK GUIDE

2. Project Performance Domains

4. Planning Performance

- Schedule
- Resources
- Budget
- Communication
- Procurement
- Changes
- Metrics
- Alignment

The PMBOK GUIDE

2. Project Performance Domains

5. Project Work Performance

- Project Process
- Balancing Competing Constrains
- Maintaining Project Team Focus
- Project Communications and Engagement
- Managing Physical Resources
- Working with procurements
- Monitoring new work and changes
- Learning throughout the project

The PMBOK GUIDE

2. Project Performance Domains

6. Delivery Performance

- Delivery of value
- Deliverables
- Quality

The PMBOK GUIDE

2. Project Performance Domains

7. Measurement Performance Domain

- Establishing effective measures
- Measurement elements
- Presenting information
- Measurement pitfalls
- Troubleshooting performance
- Growing and improving

The PMBOK GUIDE

2. Project Performance Domains

8. Uncertainty Performance

- General uncertainty
- Ambiguity
- Complexity
- Volatility
- Risk

The PMBOK GUIDE

3. Tailoring

3. Tailoring

1. Overview

2. Why Tailor

3. What to Tailor

- Development approach
- Processes
- Management
- Tools

4. The Tailoring Process

5. Tailoring the Performance Domains

6. Diagnostics

7. Summary

The PMBOK GUIDE

4. Models, Methods, and Artifacts

4. Models, Methods, and Artifacts

1. Overview
2. Commonly used Models
3. Models Applied Across Domains
4. Commonly used Methods
5. Methods Applies Across Domains
6. Commonly used Artifacts
7. Artifacts Applied Across Domains

- New edition with more details and examples is under preparation.
- Kindly contact me at nasergyofficial@gmail.com to know the publishing date.