

Summary of Project Management Body of Knowledge PMBOK7

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PMBOK7

The Standard for Project Management

A Guide to The Project Management Body of Knowledge



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PMBOK6

Standard

Guide

Initiating

Planning

Executing

Monitoring
and
Controlling

Closing

Fundamentals

PM Role

Knowledge
Areas (10)

PMBOK7

Standard

Guide

Introduction

System for
value
delivery

Principles
(12)

Performance
Domains (8)

Tailoring

Models &
Methods &
Artifacts.

PMBOK Standard

PM Standard (PMBOK6)

1. Initiating
2. Planning
3. Executing
4. Monitoring and Controlling
5. Closing

PM Standard (PMBOK7)

1. Introduction
2. System for value delivery
3. Principles
 - 1. Stewardship
 - 2. Team
 - 3. Stakeholders
 - 4. Value
 - 5. System Thinking
 - 6. Leadership
 - 7. Tailoring
 - 8. Quality
 - 9. Complexity
 - 10. Risk
 - 11. Adaptability
 - 12. Change

PMBOK Guide

PMBOK Guide (PMBOK6)

- 1.Fundamentals
- 2.PM Role
- 3.Knowledge Areas
 - 1.Integration
 - 2.Scope
 - 3.Schedule
 - 4.Cost
 - 5.Quality
 - 6.Resources
 - 7.Communication
 - 8.Risk
 - 9.Procurement
 - 10.Stakeholders

PMBOK Guide (PMBOK7)

- 1.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
- 2.Tailoring
- 3.Models & Methods & Artifacts.

PMBOK7

Start of

The Standard for Project Management



The Standard for Project Management (PM Standard PMBOK7)



The Standard for Project Management (PM Standard PMBOK7)

Introduction

- Purpose
- Terms and Conditions
- Audience for This Standard

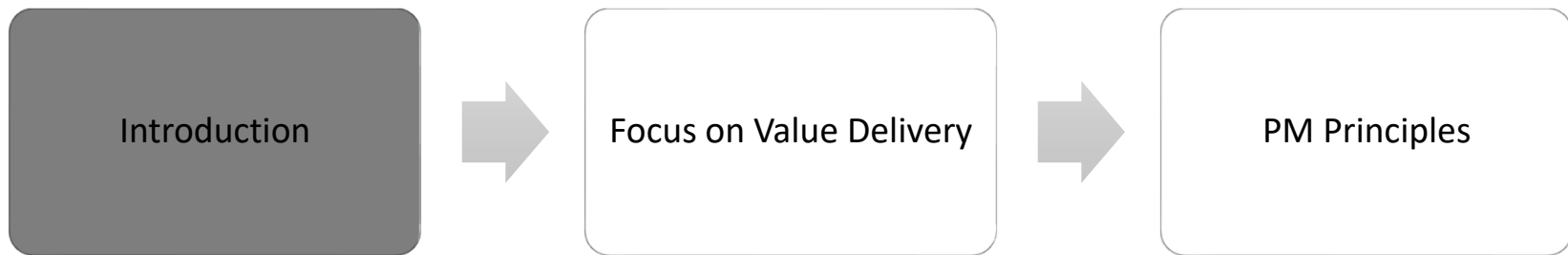
System for value delivery

- Creating Value
- Organizational Governance Systems
- Functions Associated with Projects
- The Project Environment
- Product Management Considerations

Principles

- Stewardship
- Team
- Stakeholders
- Value
- System Thinking
- Leadership
- Tailoring & Quality
- Complexity
- Risk
- Adaptability
- Change

The Standard for Project Management (PM Standard PMBOK7)



PM Standard PMBOK

1. Introduction

1.1 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.

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PM Standard PMBOK

1. Introduction

1.2 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.

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1. Introduction

1.3 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.
- 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.

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1. Introduction

1.4 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.
 - Focus on value delivery chain.

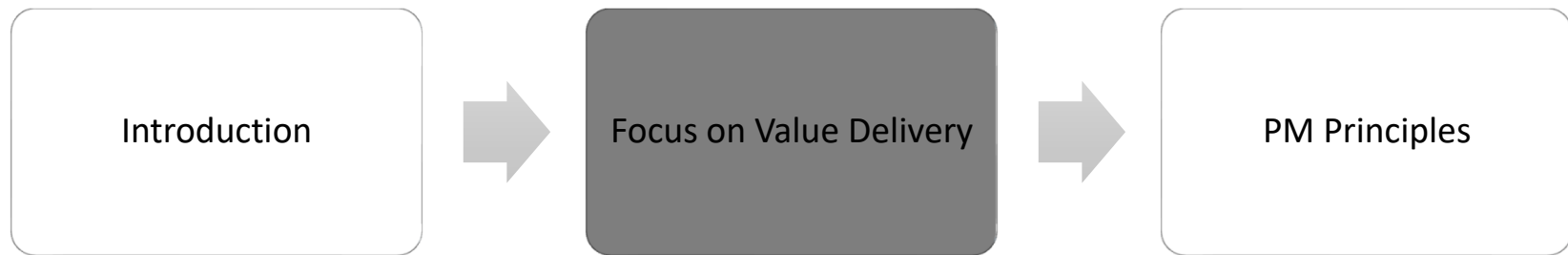
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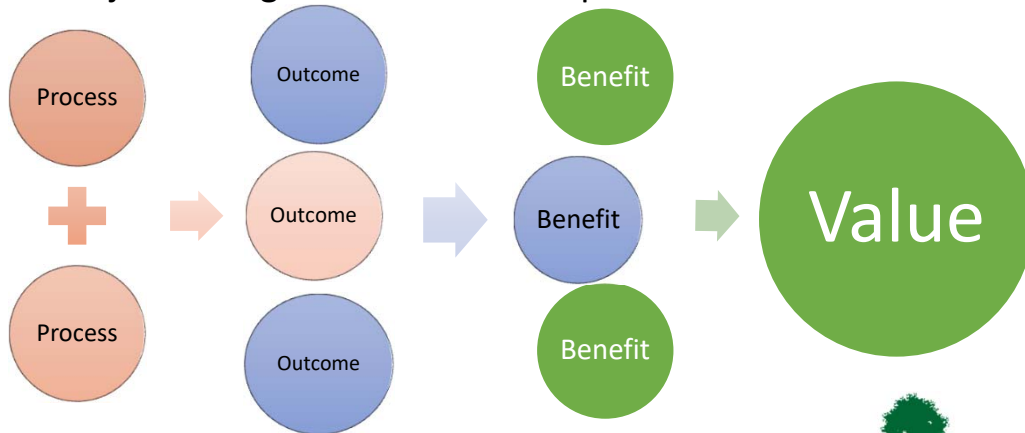


PM Standard PMBOK

2. A System for Value Delivery

2.1 Creating Value

- Introduction
 - Project should be started for creating real value, such as those examples:
 - Creating a new product, service, or result.
 - Creating positive social contributions.
 - Improving efficiency or productivity.
- Value delivery components
 - For organizations, these elements can be used to deliver value:
 - Projects- Programs- Portfolios- Operations.



PM Standard
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Introduction

System for
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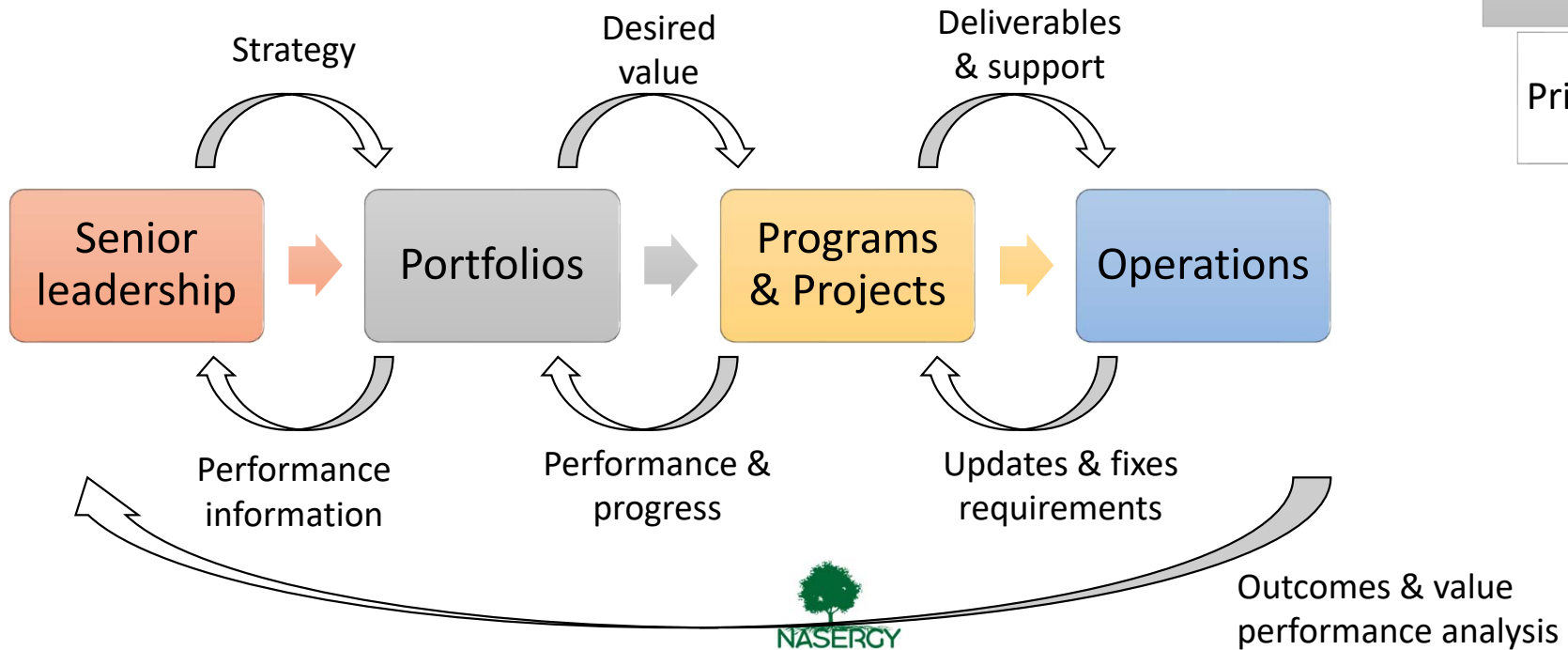
Principles

PM Standard PMBOK

2. A System for Value Delivery

2.1 Creating Value

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



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2. A System for Value Delivery

2.2 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.

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PM Standard PMBOK

2. A System for Value Delivery

2.3 Functions Associated with Projects

- Introduction
 - People drive projects by fulfilling necessary for functions for the project to run effectively and efficiently.
- Examples of functions that are often found on 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.

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2. A System for Value Delivery

2.4 The Project Environment

- Introduction
 - Projects 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.
- Internal environment.
 - Process & data & knowledge assets
 - Organization culture
 - Geographic distribution of facilities
 - Employees capability
- External environment.
 - Market conditions.
 - Regulations and rules.
 - Industry standards.
 - Economic and financial consideration.
 - Political and social conditions.

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2. A System for Value Delivery

2.5 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.
- 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.
- Product management can exist in different forms:
 - Program management within a product life cycle.
 - Project management within a product life cycle.

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2. A System for Value Delivery

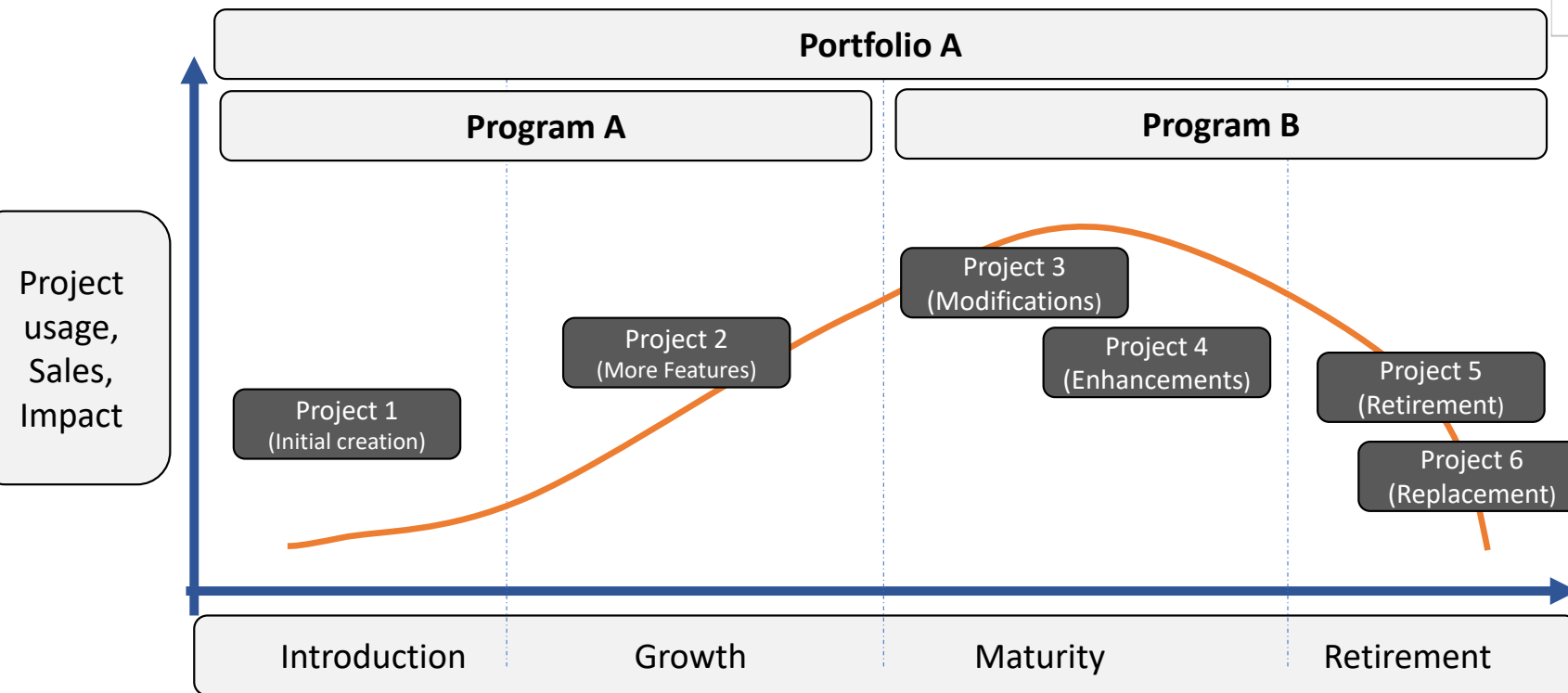
2.5 Product Management Considerations

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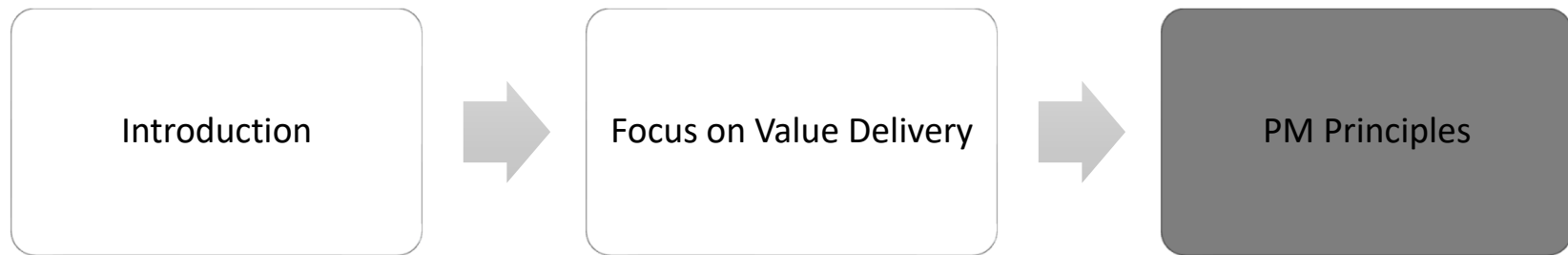
Introduction

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The Standard for Project Management (PM Standard PMBOK7)



PM Standard PMBOK

3. Principles

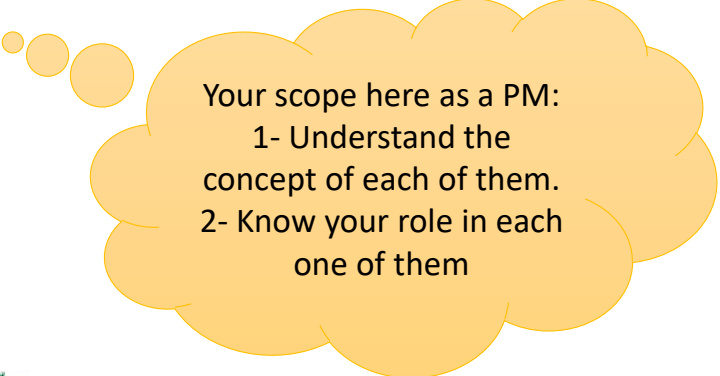
- 
1. Be a diligent Steward
 2. Create a project team environment
 3. Engage with stakeholders
 4. Focus on value
 5. Response to system interactions
 6. Demonstrate leadership behaviors
 7. Tailor based on context
 8. Build Quality into processes
 9. Navigate Complexity
 10. Optimize Risk Responses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

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Introduction

System for
value delivery

Principles



Your scope here as a PM:
1- Understand the
concept of each of them.
2- Know your role in each
one of them

PM Standard PMBOK

3. Principles

3.1 Be a diligent steward

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

3.2 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.

3.3 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.

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3.4 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.

3.5 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.

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3.6 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. They use different motivation techniques among team members.
- Leaders demonstrate desired behavior in areas of honesty and ethical conduct.

3.7 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.

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3.8 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.

3.9 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.

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3.10 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- agreed to by relevant stakeholders-owned by responsible person.

3.11 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.

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3. Principles

3.12 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.

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End of

The Standard for Project Management

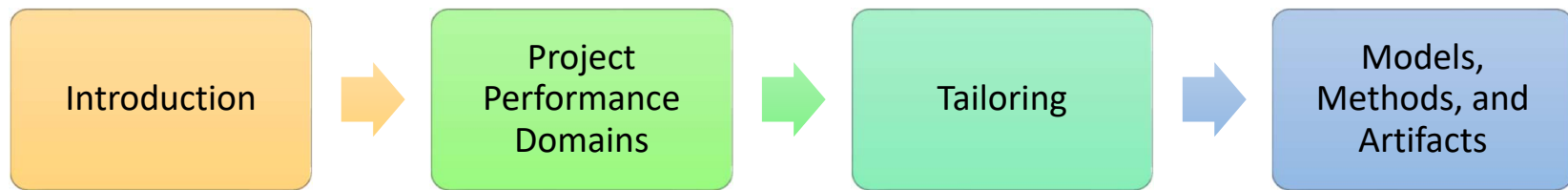




Start of

A Guide to The Project Management Body of Knowledge

A Guide to The Project Management Body of Knowledge



A Guide to The Project Management Body of Knowledge

Introduction

- Structure of the PMBOK
- Relationship of the PMBOK & PM Standard
- Changes to the PMBOK

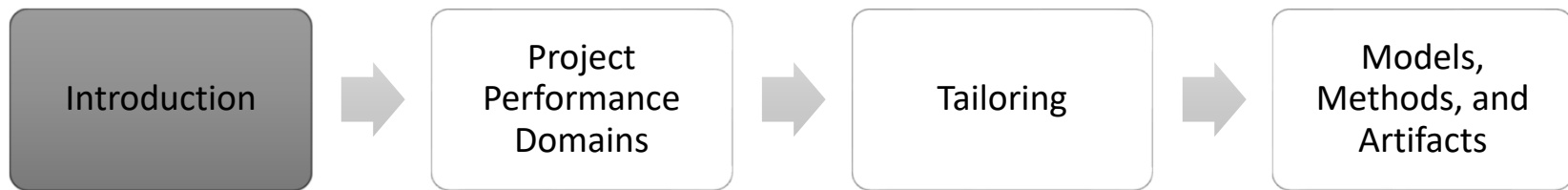
Performance Domain

- Stakeholders performance
- Team performance
- Development Approach
- Planning performance
- Work performance
- Delivery performance
- Measurement performance
- Uncertain performance

Tailoring

- Overview
- Why Tailor
- What to Tailor
- The Tailoring Process
- Tailoring the Performance Domains
- Diagnostics
- Summary

A Guide to The Project Management Body of Knowledge



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

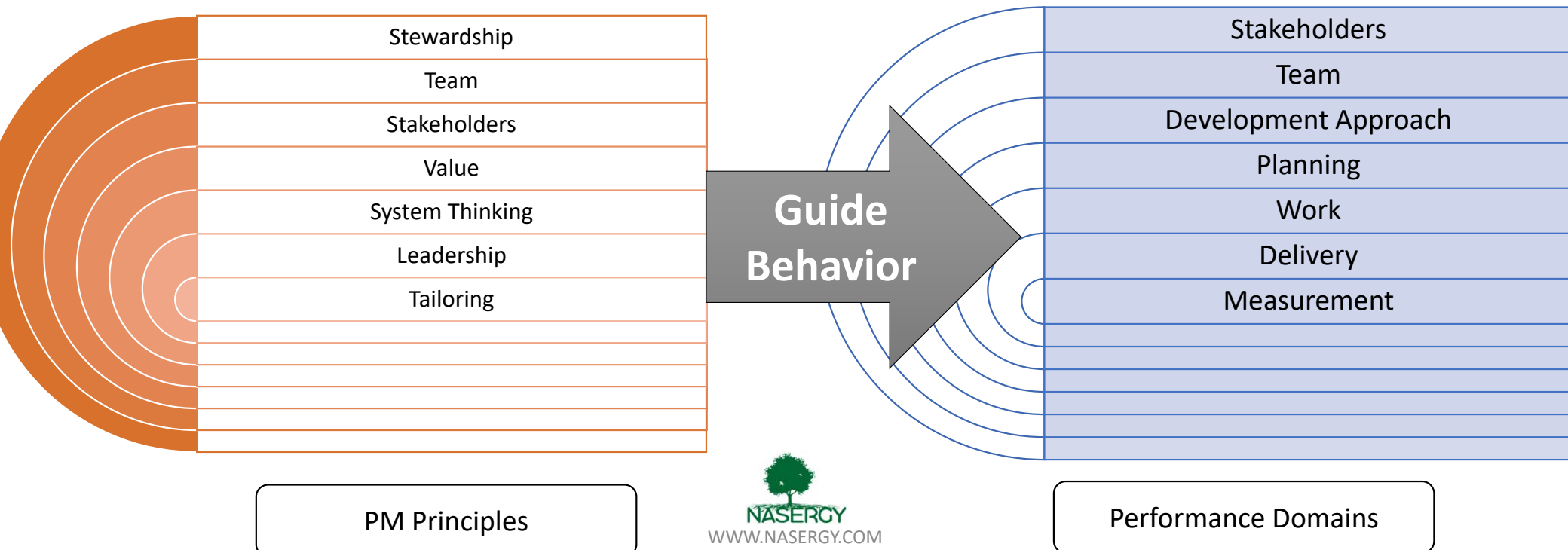
1. Structure of the PMBOK

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

2. Relationship of the PMBOK & PM Standard

1. Project management principles (in PM Standard) guide the project performance domains (In PMBOK) Guide.
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.

2. Relationship of the PMBOK & PM Standard



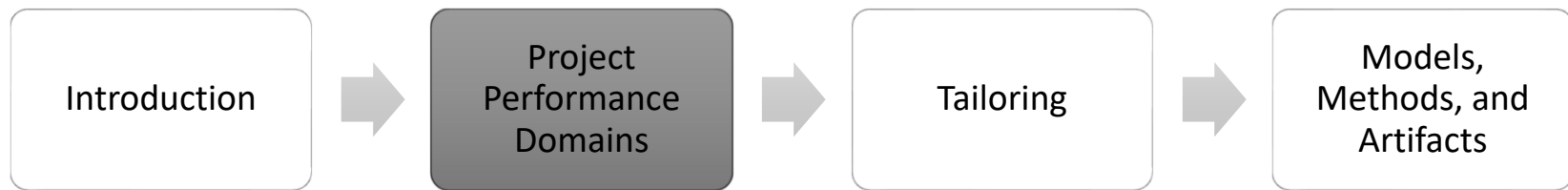
3. Changes to the PMBOK

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.

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.

A Guide to The Project Management Body of Knowledge



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

Your scope here as a PM:

- 1- Understand the content of each of them.
- 2- Know your role in each one of them.
- 3- Link each of them to PMP Exam Prep (5 Chapters).

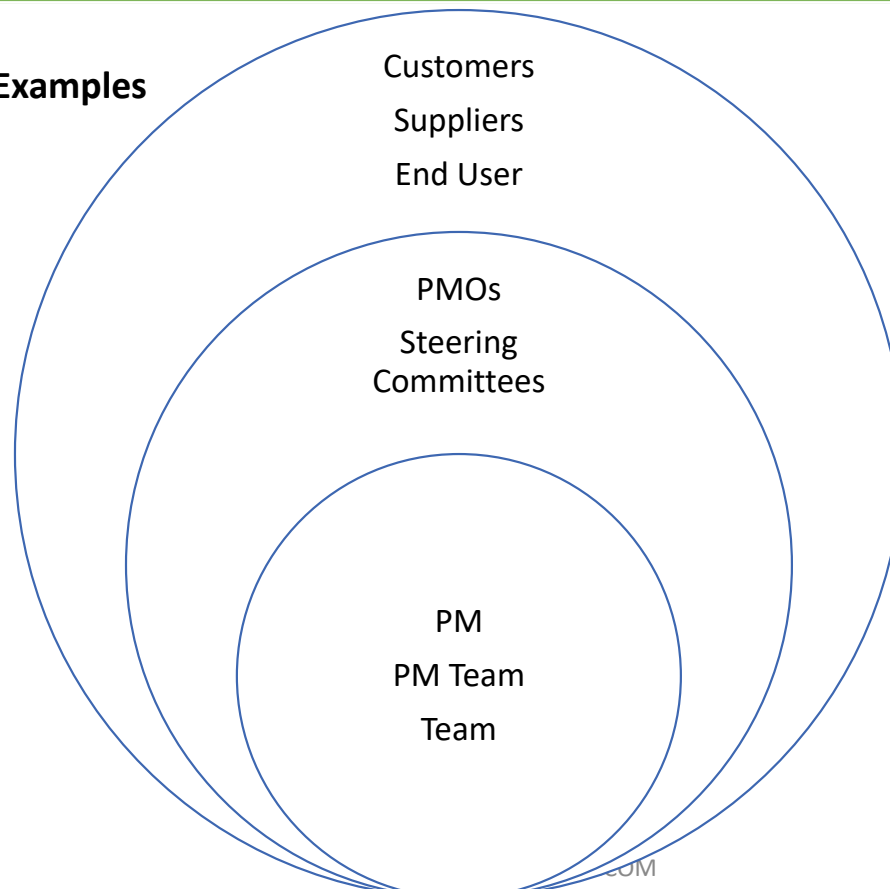
Look to yourself as "People Manager"

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.

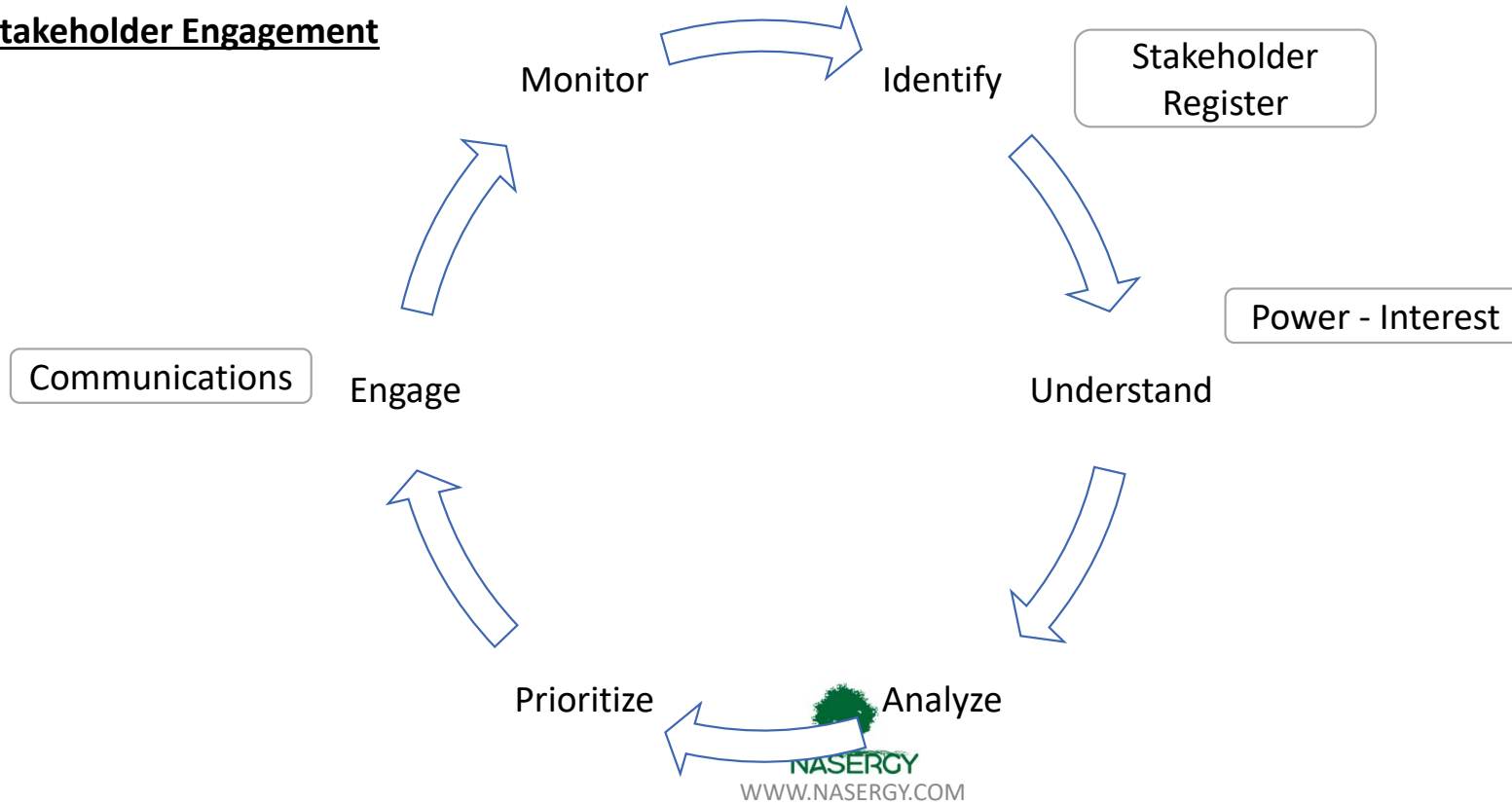
1. Stakeholder Performance Domain

Project Stakeholders Examples



1. Stakeholder Performance Domain

Stakeholder Engagement



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.



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

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

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

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.

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.

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.

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

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 interpersonal skills. The project team members leadership styles are appropriate to the project environment.



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.

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.

3. Development Approach

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

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

3. Development Approach

- Examples:

A project to develop a new community center might use a predictive approach for the construction of the grounds and facilities. The scope, schedule, cost, and resources would be determined up front, and changes would likely be minimal. The construction process would follow the plans and blueprints.

As part of the community center, a project to establish senior services could be developed and deployed iteratively. For example, the first iteration could be a Meals on Wheels program. This could be followed by a transportation service, then group outings and events, caregiver relief, adult day care, and so forth. Each service would be complete on its own and could be deployed when it was available. Each additional service would improve and increase the senior services for the community.

3. Development Approach

- Examples:

A project to establish training for community action patrol volunteers could use an incremental approach. The training, comprised of basic training, logistics training, and patrol training, can be developed by different people. It can be developed at the same time in modules, or one module can be developed, feedback gathered, and then subsequent modules can be developed. However, the community action patrol training program will only be complete after all the modules are developed, integrated, and deployed.

The community center will need a website so community members can access information from their home computer, phone, or tablet. The high-level requirements, design, and page layouts can be defined up front. An initial set of information can be deployed on the website. User feedback, new services, and internal stakeholder needs would provide content for a backlog. The backlog information would be prioritized, and the web team would develop and deploy new content. As new requirements and new scope emerge, the estimates for the work would be developed, the work would be done, and once tested, it would be demonstrated for stakeholders. If approved, the work would be deployed to the website.

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.



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.

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

4. Planning Performance

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

4. Planning Performance

- Overview
 - The objective of planning to proactively develop an approach to create the project deliverables.
 - You shouldn't move without planning but at the same time don't do extra planning than required.
- Different variables to do planning:
 - Project development approach
 - Deliverables (construction is different from product development,..)
 - Organizational structure
 - Market condition

4. Planning Performance

- Delivery
 - Predictive planning approach
 - High level deliverables > planning package > work package.
 - Iterative & incremental planning approach
 - High level themes or epics > features > user stories

4. Planning Performance

- Estimating
 - Definition:
 - Range:
 - Exploring stage, ROM -25,+75%
 - Mid of projects, -5,10%
 - Accuracy
 - The correctness of the estimate (Compass).
 - At project start, estimates have less accuracy.
 - Precision
 - The degree of exactness of the estimate.
 - Ex. this task will be delivered after 2 day (good precision). This task will delivered sometime this week (Bas precision)

4. Planning Performance

- Confidence
 - Confidence increases with experience of previous similar projects.
- Deterministic and probabilistic estimating
 - Deterministic
 - Presents a single number or amount
 - One point estimate.
 - Probabilistic estimating
 - Includes a range of estimates along with the probability range.
 - Weighted average or by using simulation programs
- Absolute and relative estimating
 - Absolute estimates are specific information and use actual numbers, such as 8 hours a day.
 - Relative estimates are shown in comparison to other estimates, such as planning poker

4. Planning Performance

- Schedule
 - Step1: Activities
 - Step2: Sequence related activities
 - Step3: Estimate duration, resources (people- physical resources)
 - Step4: allocate people& resources to activities.
 - Step5: Adjust sequence, estimate, and resources until an agreed schedule is achieved.

4. Planning Performance

- Schedule
 - Types of dependencies
 - Schedule compression
 - Develop schedule in each approach.
- Budget
 - Estimate cost
 - Determine budget

4. Planning Performance

- Planning for project team
 - Project manager to perform cost benefit analysis to use the internal team or secure them from outside the organization.
 - For small teams that can work from the same room, they are able use osmotic communication and solve problems as they arise.
 - Some project teams are physically dispersed.
 - Project teams may be in different cities or countries, more time spend connecting people through technology.
- Physical resources
 - Any resources that is not a person
 - Planning physical resources includes: estimating, supply chain, and logistics.
 - Planning the lead time for delivery and movement is also essential.

4. Planning Performance

- Communication
 - Project manager to prepare the communication management plan.
- Procurement
 - Doing up-front planning for the procurement will set expectations for smooth procurement process.
- Change
 - There will be changes throughout the project.
 - The project team should prepare a process for adapting plans (change control process, rebase lining, or reprioritizing backlog).
- Metrics
 - Metrics links the planning, delivering, with measuring.
 - Metrics set the threshold to indicate whether the performance is as expected, trending positively or negatively from expected performance.

4. Planning Performance

- Alignment (coordination)
 - Planning the scope, quality should align with delivery commitment, allocated fund.
 - Ex. Logistic plans will need to integrate with material needs, testing plans will ne to align with quality needs.
 - The timing of the work of a single project should align with the need of work with related projects.

5. Project Work Performance

- Project Process
 - Lean production methods
 - Lean production uses techniques such as value stream mapping to measure the value adding and non value adding activities.
 - Retrospectives or lessons learned
 - They give the team opportunity to review the way in which it works.
 - Where is the next best funding spent.
 - This question help the team determine if they should move on with the current task or move onto the next activity.
- Balancing Competing Constrains
 - Schedule, budget, quality, and stakeholders

5. Project Work Performance

- Maintain team focus
 - Project managers should focus on the goals of keeping the team focused on delivering value.
- Project communication & engagement
- Managing physical resources
 - Eliminate or reduce material handling and storage
 - Eliminate wait times
 - Minimizing scrap
- Working with procurement
 - Conducting procurement
 - The bid process
 - Closing procurement
- Monitoring new work and changes
- Learning throughout the project

6. Delivery Performance

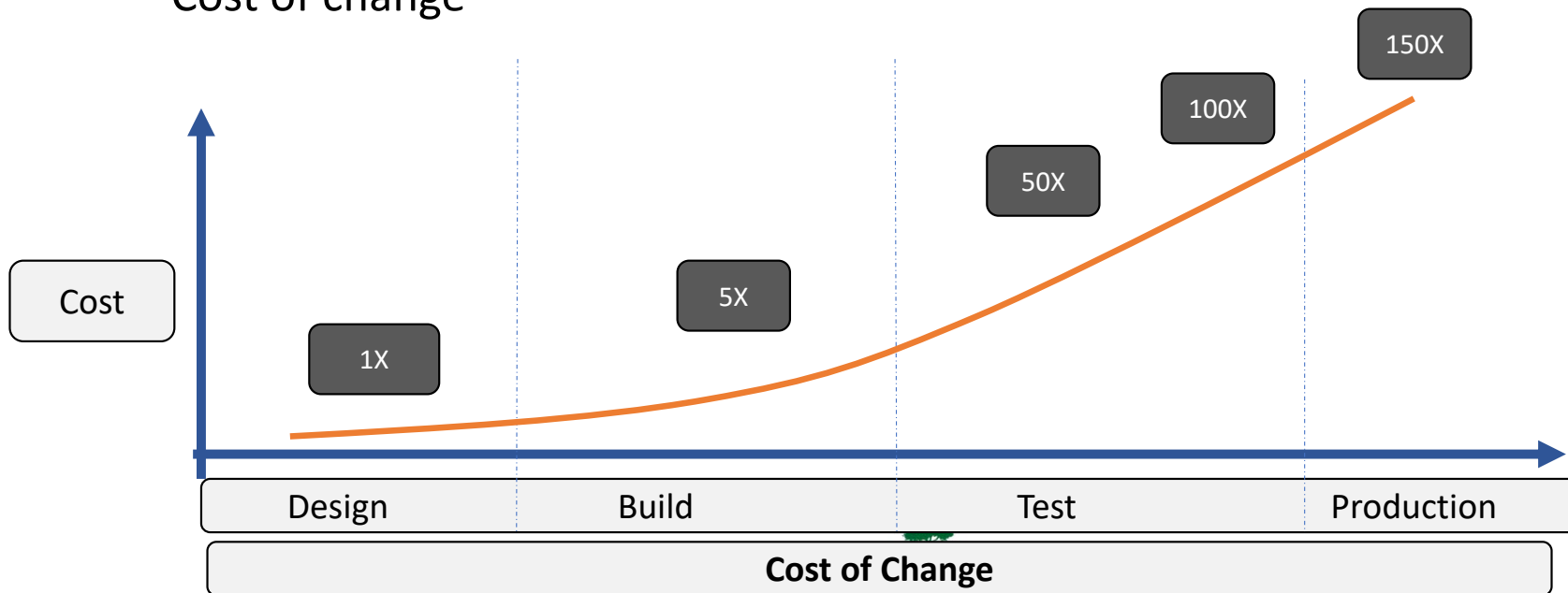
- The delivery performance domain addresses activities and functions associated with delivering the scope and quality that the project was undertaken to achieve.
- Definition of Done (DoD): is a checklist of all the criteria required to be met so that a deliverable can be considered ready for customer use.
- Done Drift: in the projects that develop rapid changing, they face the situation that “good enough to release” my change, so done drift refers to “the longer the project takes to complete, the further the project goal of DONE is likely to move”.
- Delivery of value
- Before the project start, a business case document is provided.
- During or at the end of the project, project deliverables are provided.
- At the end and long after project end, business value to be captured.

6. Delivery Performance

- Deliverables: They refer to the interim or final product, service, or result from a project.
- The deliverables enable the outcomes that the project was undertaken to create.
- The deliverables reflect the stakeholder requirements, scope, and quality along with the long-term impact to profit, people, and the planet.
- Development of deliverables
 - Requirements
 - Scope definition
 - Moving target of completion

6. Delivery Performance

- Quality
- Cost of quality
- Cost of change



7. Measurement Performance Domain







- Introduction
 - This domain addresses activities associated with assessing project performance and taking appropriate action to maintain acceptable performance.
- Definitions
 - Metric: A description of a project or product attributes and how to measure it.
 - Baselines: The approved version of a work product used as a basis for comparison to actual results.
 - Dashboard: A set of charts and graphs showing progress or performance against important measures of the project.

7. Measurement Performance Domain

- Establishing effective measures
 - Using KPIs, which are quantifiable measures used to evaluate the project success.
 - Lead indicators: predict changes in the project (ex. Risk management – success criteria).
 - Lagging indicators: measure project deliverables or events, they provide information after the fact (ex. Progress%, CV-SV)
 - Setting metrics should be done effectively (SMART).
 - SMART: Specific, Measurable, Agreed to, Realistic, Time bound

7. Measurement Performance Domain

- Measurement elements
 - Common metrics categories:
 - Delivery (progress- cycle time- batch size)- baselines (SV-SPI-CV-CPI)- resources- business value (cost benefit ratio- ROI- NPV) – Stakeholders (NPS- Mood Chart)- forecasts (ETC- EAC- VAC-TCPI).

Team	Sun	Mon	Tue	Wed	Thu
Ahmed					
Jane					

Mood Chart

7. Measurement Performance Domain

- Presenting information
 - Dashboards (visible summary)– information radiators (Big visible charts, BVC, they are posted in a place where people can see the information easily)- visual controls (Task board- burndown chart- burnup chart).
- Measurement pitfalls, they help the project team meet the project objectives.
 - Hawthorne effect: The very act of measuring something influences behaviors (ex. Measuring only team progress can lead the team to focus on quantity not quality).
 - Vanity metrics: It shows data but doesn't provide useful information for making decision (ex. Measuring page viewers of a website is not as useful as measuring the new visitors daily).

7. Measurement Performance Domain

- Demoralization: in case the goals are not achievable, project team morale may fall down. So set hard but attained goals.
 - Misusing the metrics: Focusing on the less important metrics rather than good achievement happen. Focusing on well performance for short term and neglect long term goals.
 - Confirmation bias: As human beings, focusing on false interpretation of data in order to prove certain point of view.
 - Correlation versus causation: getting confused with two variables that one causes the other (ex. Seeing projects are behind schedule and over budget might infer that projects that are over budget cause schedule issues, but this is not true).

7. Measurement Performance Domain

- Troubleshooting performance
 - Assume you planned your budget and have tolerance +10% and -20%, then you can draw this curve (plan- upper & lower tolerances- actual) to use it for performance troubleshooting.
- Growing and improving
 - The objective of measuring is to learn and improve, so when measuring and reporting, focus on:
 - Allowing the team to learn- improving project performance- avoiding issues-...

8. Uncertainty Performance

- Introduction
 - The uncertainty performance domain addresses activities and functions associated with risk and uncertainty.
- Definitions
 - Uncertainty: a lack of understanding and awareness of issues, events or solutions.
 - Ambiguity: a state of being unclear, having difficulty in getting the cause of events.
 - Complexity: a characteristics of a program or project that is difficult to manage due to human behavior or system behavior.
 - Volatility: The possibility for rapid and unpredictable change.
 - Risk: An uncertain event or condition that, if occurs, has a positive or negative effect in one or more project objectives.

8. Uncertainty Performance

- General uncertainty
 - How to respond to uncertainties:
 - Gather information
 - Prepare for multiple outcomes
 - Set based design (look for alternatives/options early in the project)
 - Build in resilience
- Ambiguity
 - Conceptual ambiguity: lack of effective understanding (ex. “The schedule was reported on track last week” this statement is not clear it submitted last week or it is on track last week?)
 - Situational ambiguity: when you have multiple option to solve a problem.

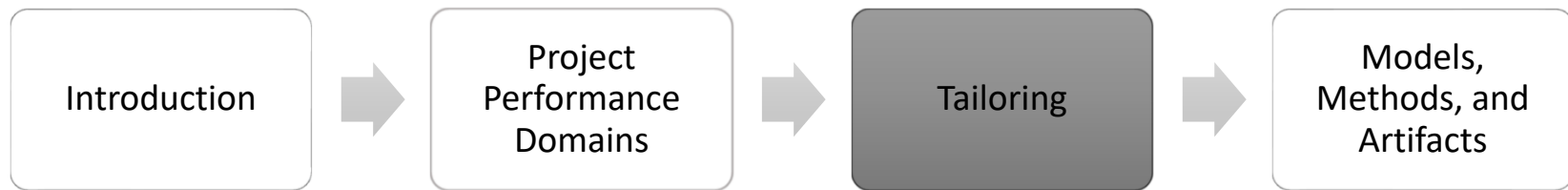
8. Uncertainty Performance

- Ambiguity solution:
 - Use progressive elaboration approach
 - Do experiments
 - Use prototypes
- Complexity
 - You can work with complexity by these methods (System based- Reframing- Process based)
 - System based: decoupling (disconnect part of the system for simplification) – Simulation (you try the feature in similar location) .
 - Reframing: diversity (thinking in the complex system from diverse perspectives by using brainstorming) – balance (don't focus on using past data by balance with other types of data as well).

8. Uncertainty Performance

- Process based: Iterate (work incrementally, add feature one at a time)- Engage (get stakeholder engagement)- Fail safe (create redundancy that can provide a graceful degradation of functionality)
- Volatility
 - Volatility can occur when there are ongoing fluctuations in available materials of skills.
 - Alternative analysis and use of cost or schedule reserve address volatility.
- Risk
 - Impact (Threats)
 - Probability
 - Risk Response

A Guide to The Project Management Body of Knowledge

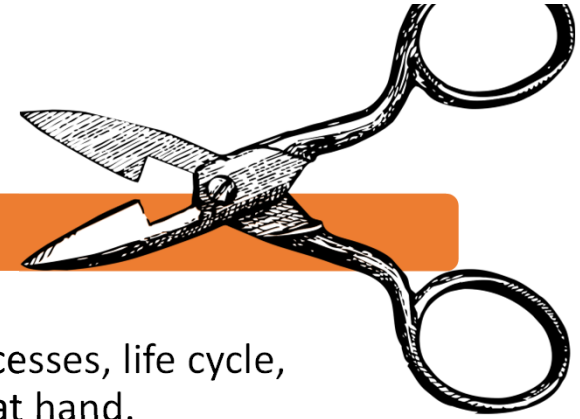


The PMBOK GUIDE

3. Tailoring

3. Tailoring

1. Overview
2. Why Tailor
3. What to Tailor
4. The Tailoring Process
5. Tailoring the Performance Domains
6. Diagnostics
7. Summary



3. Tailoring

1. Overview

- It is the process of adapting the project management approach, processes, life cycle, deliverables, and choice of people to be suitable for the given work at hand.
- The project management principles in The Standard for Project Management drives the tailoring efforts.
- Ex: If one of the project principles is Engage with stakeholders” (Principle no.3 in the standard), and the organization value for the project is “customer centric”, so this will tailor the process of collect requirement for example to use the activities for collect requirements, score validation, customer collaboration will be tailored and selected carefully to serve this value and this principle.

3. Tailoring

You are the tailor-
man of your
project

انت التريزي بتاع المشروع



3. Tailoring

2. Why Tailor

- More commitment from project team members
- Customer-oriented focus
- More efficient use of project resource.

Why you use
communication plan and
coordination work for
10 persons project
similar to the same of
200 persons project??
Be smart my friend

3. Tailoring

3. What to Tailor

- Life cycle (waterfall- agile- start waterfall then agile or start agile then waterfall “hybrid”).
- Processes
 - Adding: adding a new inspection process at raw material receiving.
 - Modified: modifying the team meeting to be online due to team location limits.
 - Removed: removing the process of meeting agenda for collocating meeting.
 - Blended: Belding the sprint retrospective meeting with the new sprint planning meeting to save time and ignite the team.
 - Aligned: Aligning the inspection process to follow either 6 sigma approach or Plan-Do-Check-Act approach.

3. Tailoring

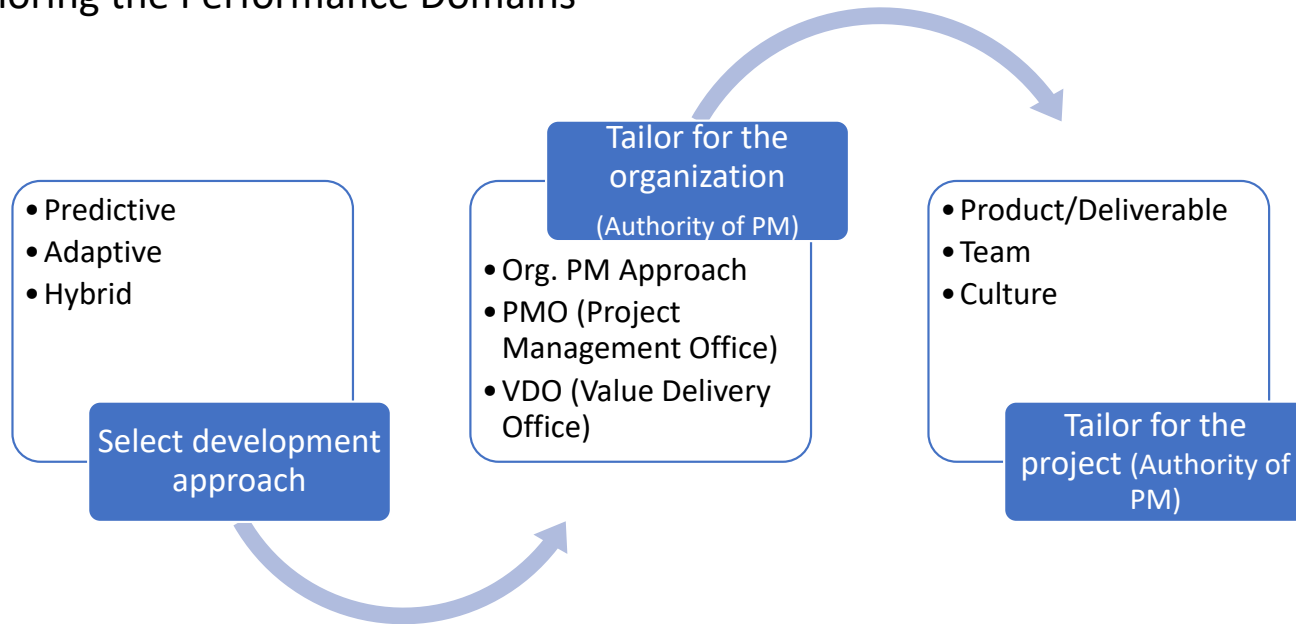
3. What to Tailor

- Engagement
 - People: deciding who will be engaged and where and how. Ex. When to use high experience people or fresh joined members..
 - Empowerment: deciding when to give high levels of empowerment and when to give less empowerment with more supervision.
 - Integration: deciding when to use your staff, contracted staff or a mix from both.
- Tools, selecting the tools like software or equipment that the team can use.
- Methods of working and Artifacts, which methods or documents that can be used for your particular project (*check next part “Models, Methods, and Artifacts” for some nice examples*).

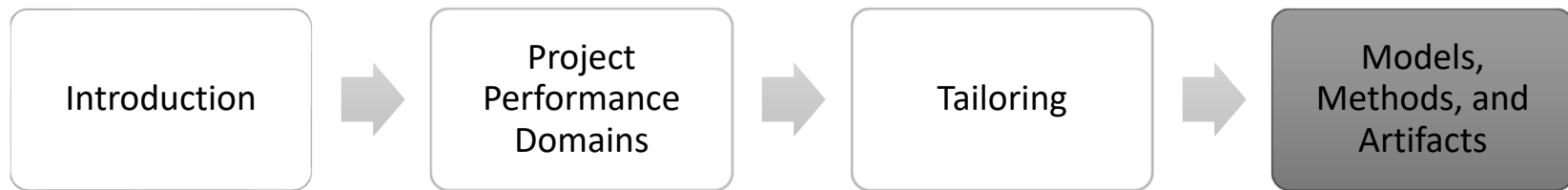
3. Tailoring

4. The Tailoring Process

a) Tailoring the Performance Domains



A Guide to The Project Management Body of Knowledge



4. Models, Methods, and Artifacts

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

4. Models, Methods, and Artifacts

1. Overview

- Model: Thinking **strategy** to explain a process or framework, how something works in the real world.
- Method: a **mean to achieve** the deliverables.
- Artifact: template, **document**, output, or deliverables.
- The team creates a strategy, develop a method to achieve this strategy, use artifacts to implement that method.

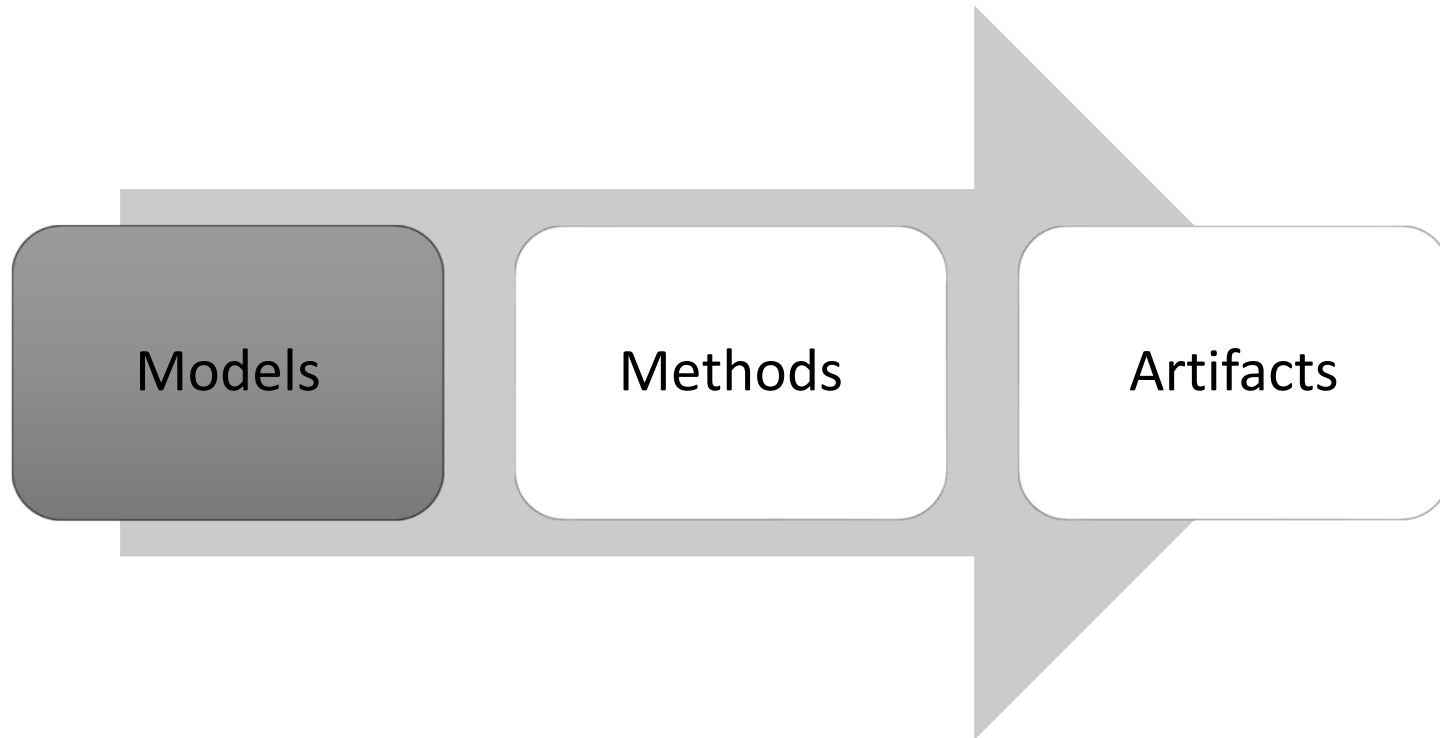
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4. Models, Methods and Artifacts

4. Models, Methods, and Artifacts

1. Models
2. Methods
3. Artifacts

A Guide to The Project Management Body of Knowledge



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4. Models, Methods and Artifacts

Models

1. Situational leadership model
2. Communication Models
3. Motivational models
4. Change Model
5. Complexity Models
6. Project Team Development Models
7. Other Models

1. Situational leadership model

- (Ken Blanchard)
 - it describe ways to tailor one's leadership style to meet the need of the individual and the team.
 - Situational leadership: it uses the competence (combination of ability-knowledge- skills) and commitment (confident-motivation) as two main variables. You move from directing to coaching to supporting to delegating based on the situation.
- OSCAR model
 - (Karen & Andrew): it has 5 contributing factors:
 - Outcome – Situation –Choice / consequences – Actions – Review

2. Communication Models

- Cross cultural communication
 - The info is influenced by the sender/receiver knowledge, experience, and language.
- Effectives of communication channels
 - It discusses the amount of learning that can be transmitted through a medium.
- Gulf of execution and evaluation
 - It is the difference between the intention of a user and what the item allows them to do in reality.

3. Motivational models

- Hygiene and motivational factors
- Intrinsic versus extrinsic motivation
 - Intrinsic motivators are far longer lasting and more effective.
 - Intrinsic motivation examples: autonomy – mastery – purpose.
 - extrinsic motivation examples: salary
- Theory of needs
 - Achievement – power – affiliation
- Theory X, Y, Z

4. Change models

- Change framework has 5 elements:
 - formulate change – plan change – implement change- manage transition- sustain change.
- ADKAR model, it focuses on 5 steps: Awareness – Desire – Knowledge – Ability- Reinforcement.
- Kotter Model, 8 steps (mentioned in PMP, Chapter4)
- Virginia Satir Change Model: how people experience and cope with change. It has 6 stages to move through any change effectively:
 - Late status quo – the foreign elements chaos- the transforming idea- practice and integration – new status quo
- Transition model:
 - Ending, losing, and letting go – the neutral zone- the new beginning.

5. Complexity Models

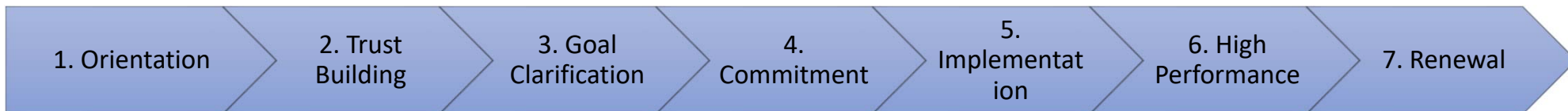
- Cynefin Framework
 - It is used to diagnose the cause and effect relationship as a decision making aid. It has 5 contexts:
 - Obvious – complicated- complex- chaotic- disordered cause & effect relationship
- Stacey matrix, it determines the project complexity by analyzing 2 dimensions:
 - The relative uncertainty of the requirement for the deliverables.
 - The relative uncertainty of the technology that will be used.

6. Project Team Development Models

- Tuckman ladder

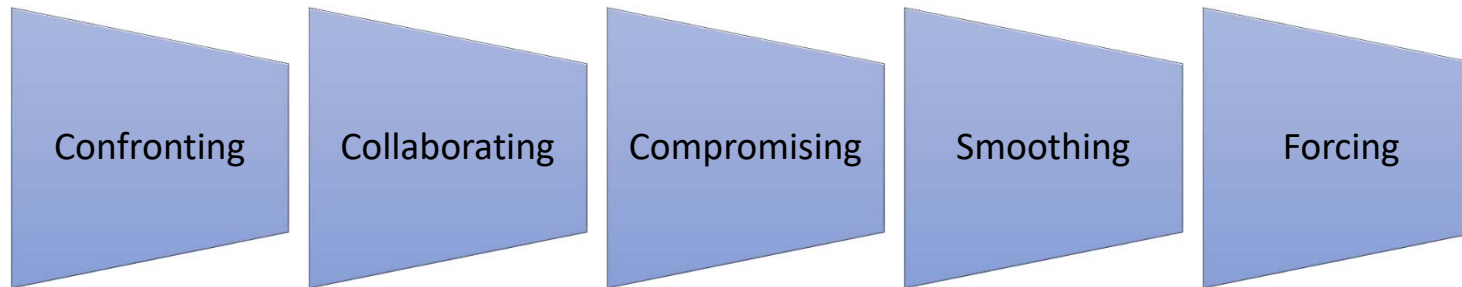


- Drexler/Sibbet Model

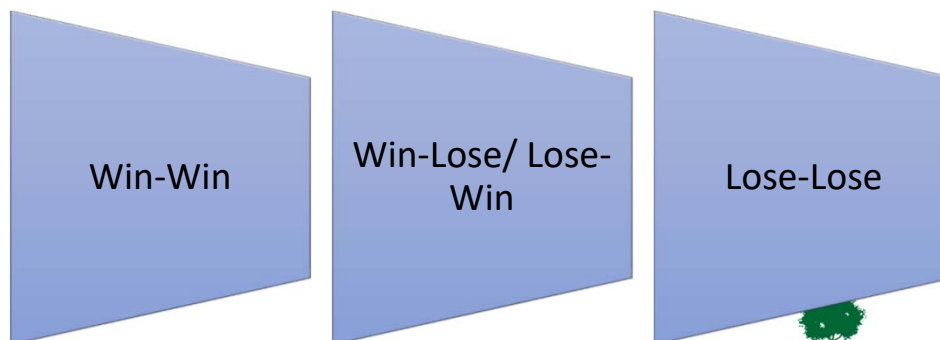


7. Other Models

- Conflict model:



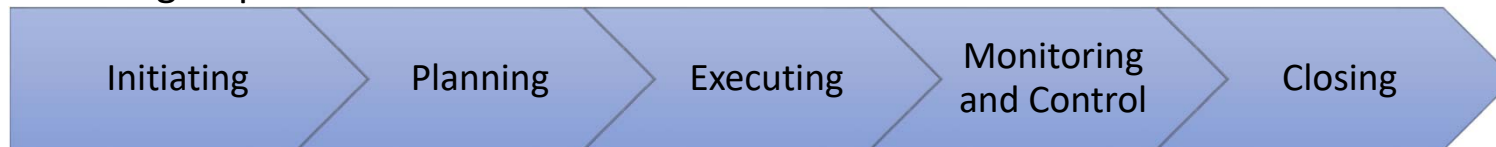
- Negotiation:



Other Models

- Planning
 - Barry Boehm model
 - This model balances the time and effort invested in project planning to reduce risks.
 - More planning upfront helps prevent mistakes, but too much planning can lead to delays and missed opportunities.
 - The model aims to find the right amount of planning, called the "sweet spot".
 - It shows that excessive planning can be counterproductive.

- Process groups



- Salience Model



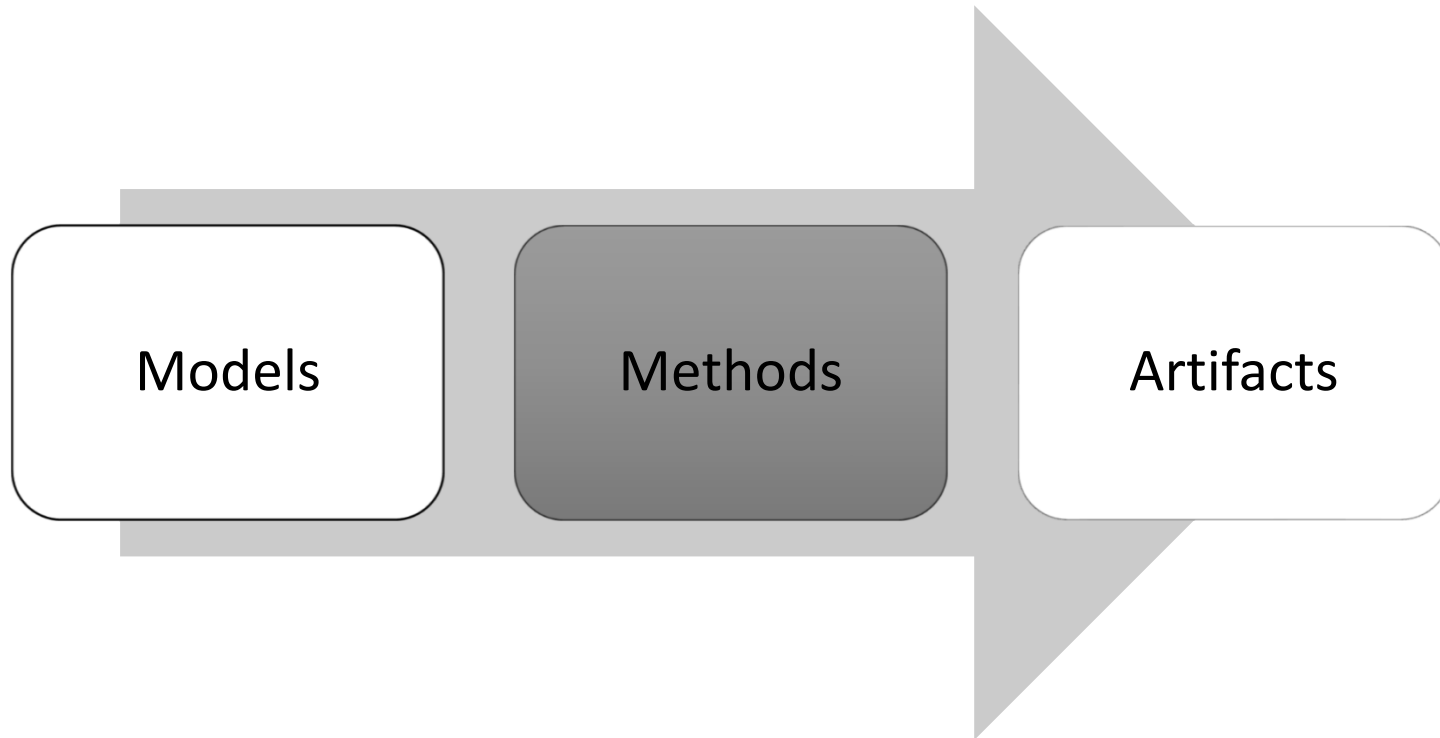
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4. Models, Methods and Artifacts

Models and Performance Domains

Project Management Models		Performance Domains							
Models	Model Topic	Team	Stakeholder	Approach	Planning	Prj Work	Delivery	Measure	Uncertain
1 Leadership	Situational Leadership® II	X				X			
1 Leadership	OSCAR	X				X			
2 Communicatic	Cross-cultural communication	X	X		X	X			
2 Communicatic	Effectiveness of communication channels	X	X		X	X			
2 Communicatic	Gulf of execution and evaluation		X				X		
3 Motivation	Hygiene and motivation factors	X			X	X			
3 Motivation	Intrinsic versus extrinsic motivation	X			X	X			
3 Motivation	Theory of needs	X			X	X			
3 Motivation	Theory X, Theory Y, and Theory Z	X			X	X			
4 Change	Managing Change in Organizations		X		X	X			
4 Change	ADKAR®		X		X	X			
4 Change	8-Step Process for Leading Change		X		X	X			
4 Change	Transition		X		X	X			
5 Complexity	Cynefin framework			X	X	X	X		X
5 Complexity	Stacey matrix			X	X	X	X		X
6 Team Develop	Tuckman Ladder	X				X			
6 Team Develop	Drexler/Sibbet Team Performance	X				X			
7 Other	Conflict	X	X			X			
7 Other	Negotiation		X		X	X	X		
7 Other	Planning			X	X	X			
7 Other	Process Groups				X	X	X	X	
7 Other	Salience		X		X	X			

A Guide to The Project Management Body of Knowledge



The PMBOK GUIDE

4. Models, Methods and Artifacts

Methods

1. Data Gathering
2. Estimation
3. Meetings and events
4. Other methods

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4. Models, Methods and Artifacts

1. Data Gathering

1. Alternatives analysis.
2. Assumption and constraint analysis
3. Benchmarking
4. Business justification analysis methods
5. Check sheet.
6. Cost of quality
7. Decision tree analysis
8. Earned value analysis
9. Expected monetary value (EMV).
10. Forecast
11. Influence diagram
12. Life cycle assessment
13. Make-or-buy analysis
14. Probability and impact matrix
15. Process analysis.
16. Regression analysis
17. Reserve analysis
18. Root cause analysis
19. Sensitivity analysis
20. Simulations
21. Stakeholder analysis
22. SWOT analysis
23. Trend analysis
24. Value stream mapping
25. Variance analysis
26. What-if scenario analysis

2. Estimating

1. Affinity grouping

- Involves classifying items into similar categories or collections. Common affinity groupings include T-shirt sizing and Fibonacci numbers.

2. Analogous estimating

- It uses historical data from a similar activity or project.

3. Function Point

- A function point is an estimate of the amount of business functionality in an information system. Function points are used to calculate a functional size measurement (FSM) of a software system.

4. Multipoint estimating

- It applies an average or weighted average of optimistic, pessimistic, and most likely estimates

5. Parametric estimating

- It uses an algorithm to calculate cost or duration based on historical data and project parameters.

6. Relative estimating

- It is derived from performing a comparison against a similar body of work, Story points are a common example.

7. Single point estimating

- Single-point estimating involves using data to calculate a single value that reflects a best-guess estimate.

8. Story point estimating

- Story point estimating involves project team members assigning abstract, but relative, points of effort required to implement a user story.

9. Wideband Delphi

- Wideband Delphi is a variation of the Delphi estimating method where subject matter experts complete multiple rounds of producing estimates individually, with a project team discussion after each round, until a consensus is achieved.

3. Meetings and Events

1. Backlog refinement

- The backlog is progressively elaborated and (re)prioritized to identify the work that can be accomplished in an

2. upcoming iteration

3. Bidder conference

4. Change control board

5. Daily standup

6. Iteration planning

7. Iteration review

8. Kickoff

9. Planning meeting

10. Project closeout

7. Project review

8. Release planning

9. Retrospective

10. Risk review

11. Status meeting

12. Steering committee

We are not yet done but
thank you for now!

- This edition is 4.1 and a new edition is in progress.
- Kindly contact us at naser@nasergy.com or nasergyofficial@gmail.com to get the new version.
- We will be happy to collaborate to help more and more people.

Thanks again!

Mohamed Naser

CEO of Nasergy

