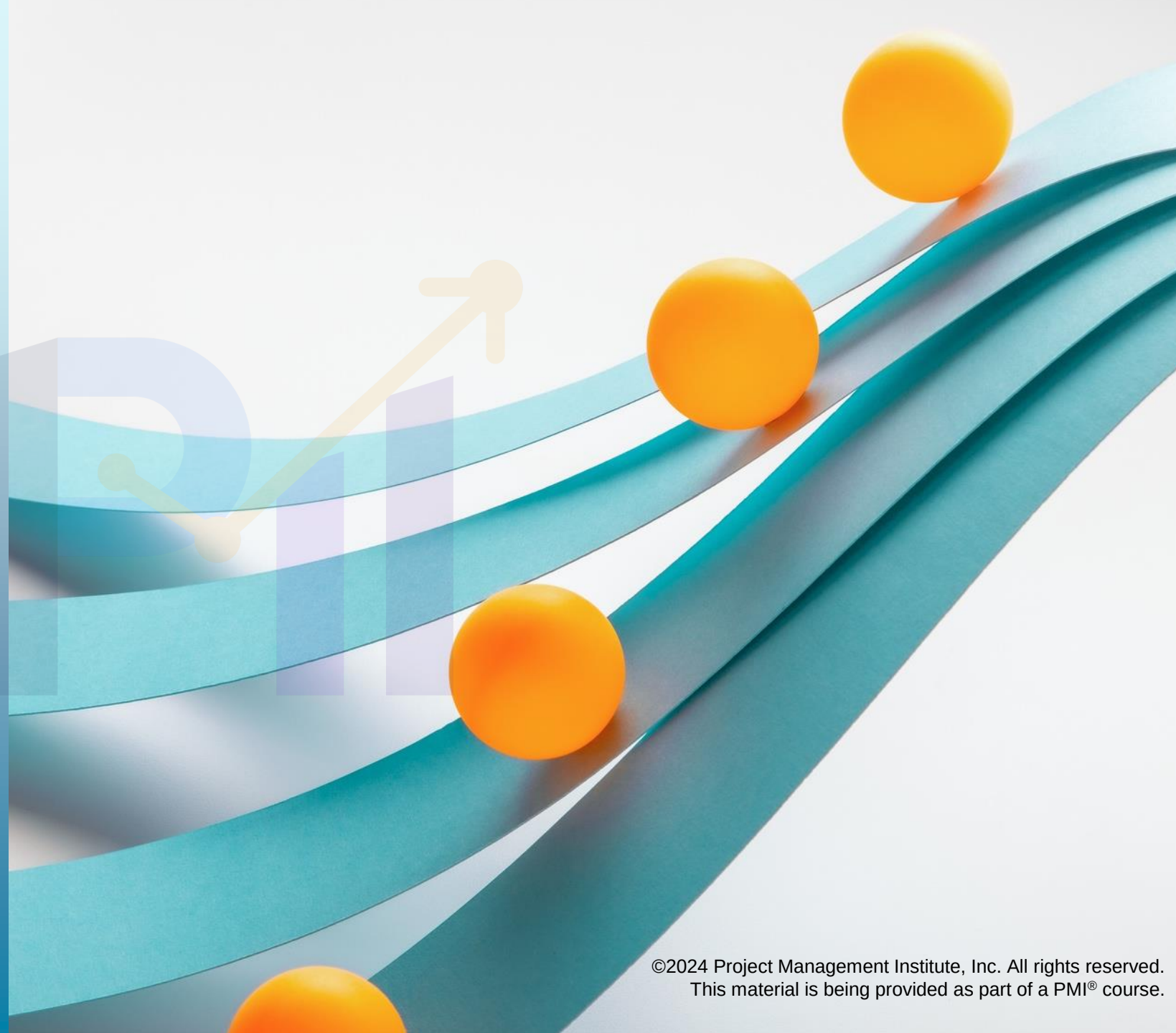
LESSON 4

Development Approach and Life Cycle

Figuring Out Your Team's Way of Working

Version 2.0 | June 2024 Release



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In This Session:

4A Fundamentals of the Project Life Cycle

4B Tailoring the Project Life Cycle and Development Approach

4C Project Activities, Deliverables, and Milestones

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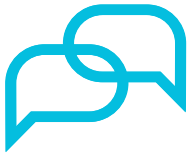
4A Life Cycles in Project Management

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Life Cycles:
Projects and Products



Exam questions may refer to a team building a product. ***But "product" can also mean services, results, or outcomes—for example, improvements!***



Can you share some examples?

Project

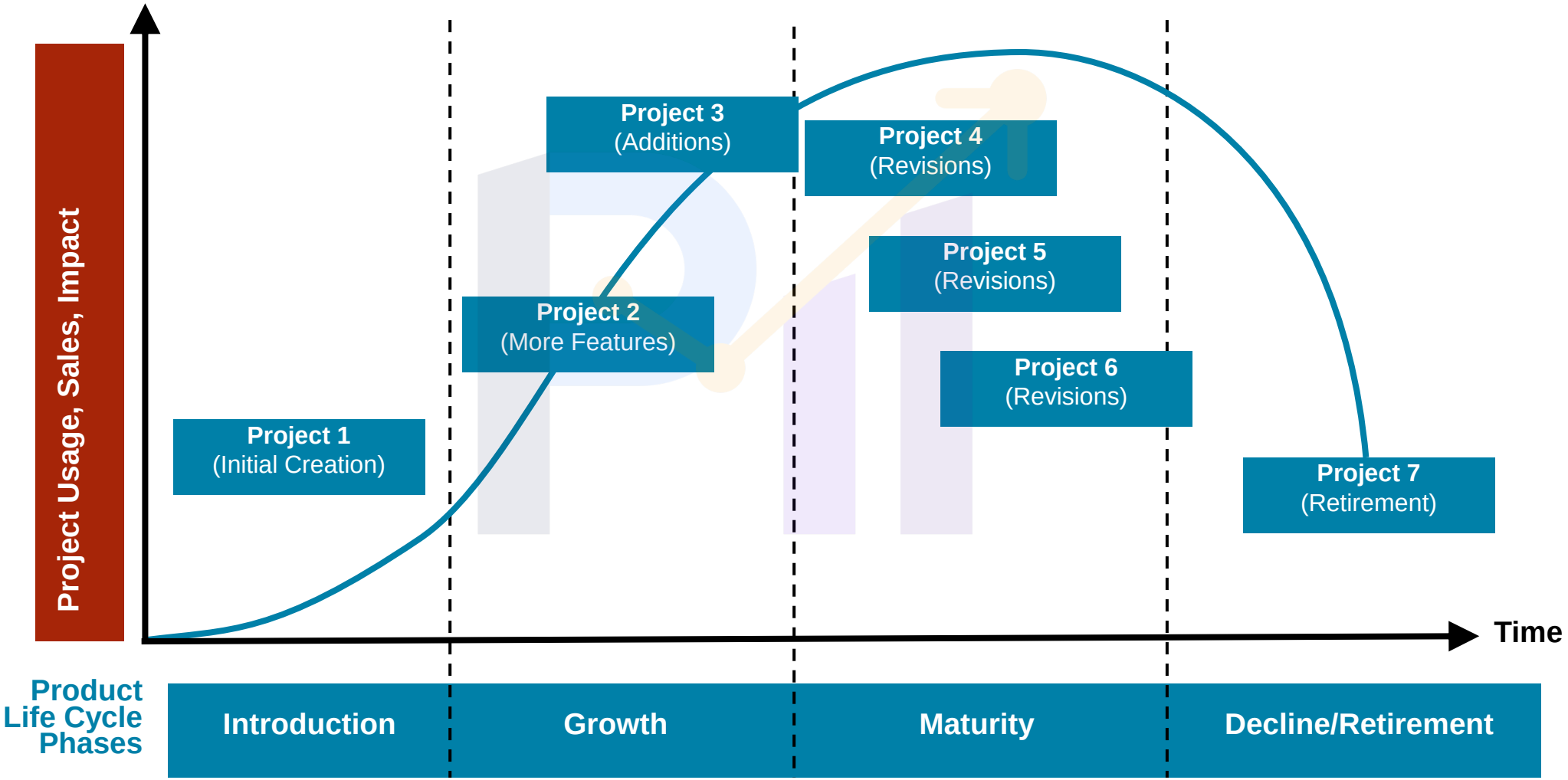
A temporary endeavor undertaken to create a unique **product**, **service**, or **result**

Product

An artifact that's produced, is quantifiable, and can be either an end item in itself or a component item

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Project and Product Life Cycle



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All Projects Begin With Ideas

To meet needs or solve problems, organizations create **initiatives**

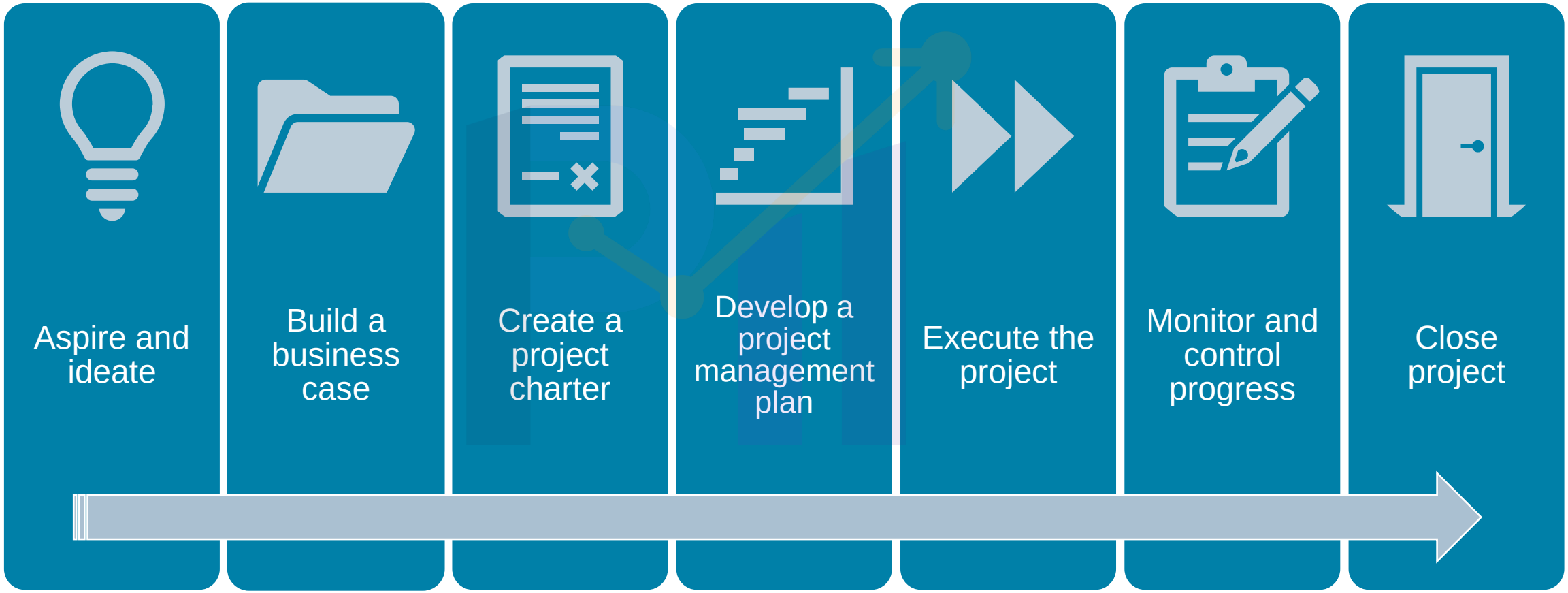
During the **ideation/aspiration** phase, an initiative matures through discussion and testing—**business analysis**

Until the organization decides to move some or all of it forward with a **project**



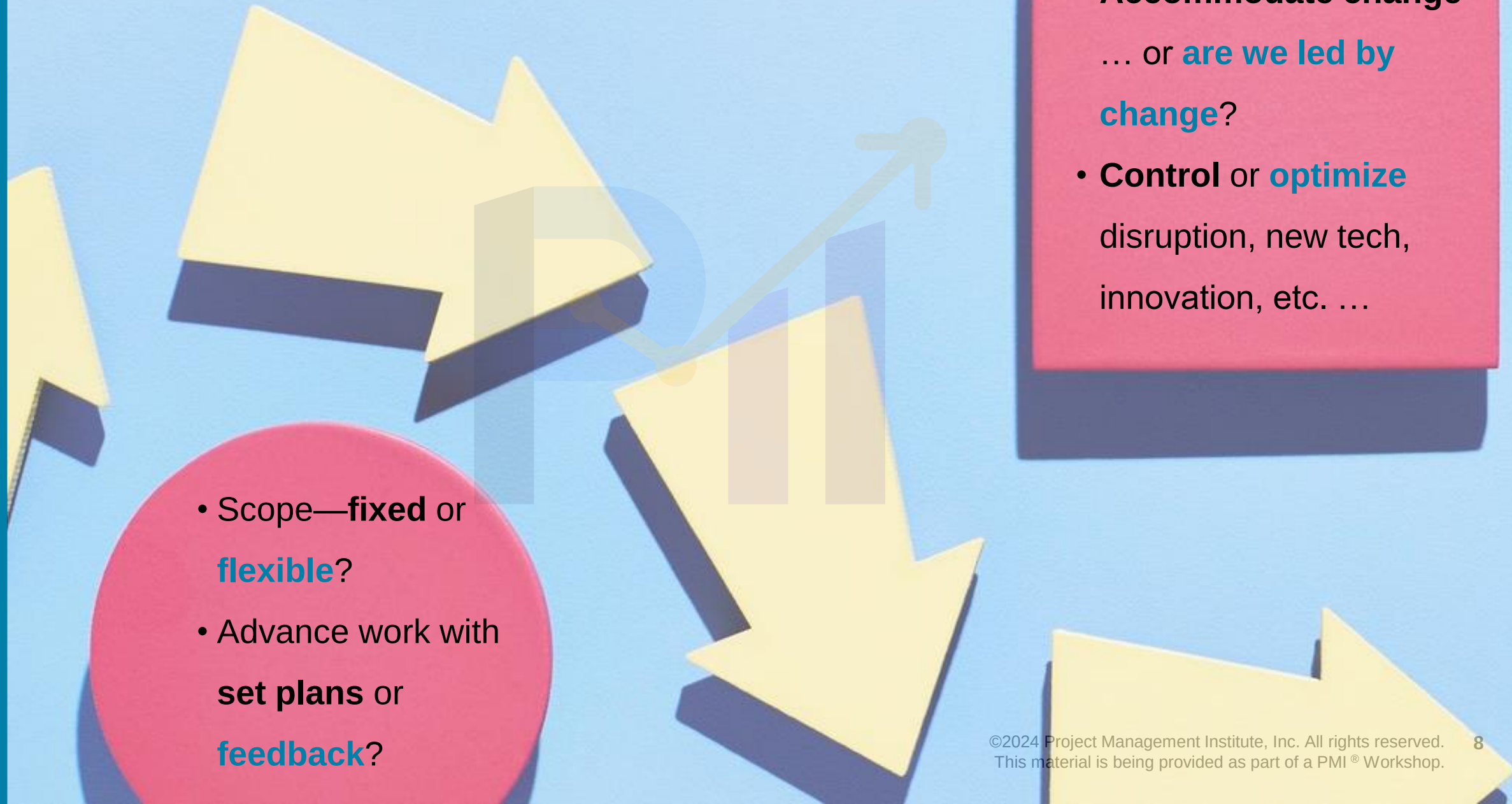
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Project Life Cycle: Overview of Phases



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Navigating the Project Life Cycle



- Scope—**fixed** or **flexible**?
- Advance work with **set plans** or **feedback**?

- **Accommodate change** … or **are we led by change**?
- **Control** or **optimize** disruption, new tech, innovation, etc. …

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Use Phases and Phase Gates

Phase—*Collection of logically related project activities that culminate in the completion of one or more deliverables*

Phase gate—*A review at the end of a phase in which a decision is made to continue to the next phase, continue with modification, or end the project or program*



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Use Phases, Feedback Loops, and Incremental Value Delivery

- Businesses love incremental value delivery for early return on investments
- Feedback loops keep customers engaged
- Iterations enable innovation, “fail fast” mindset, and customer-centric product development!





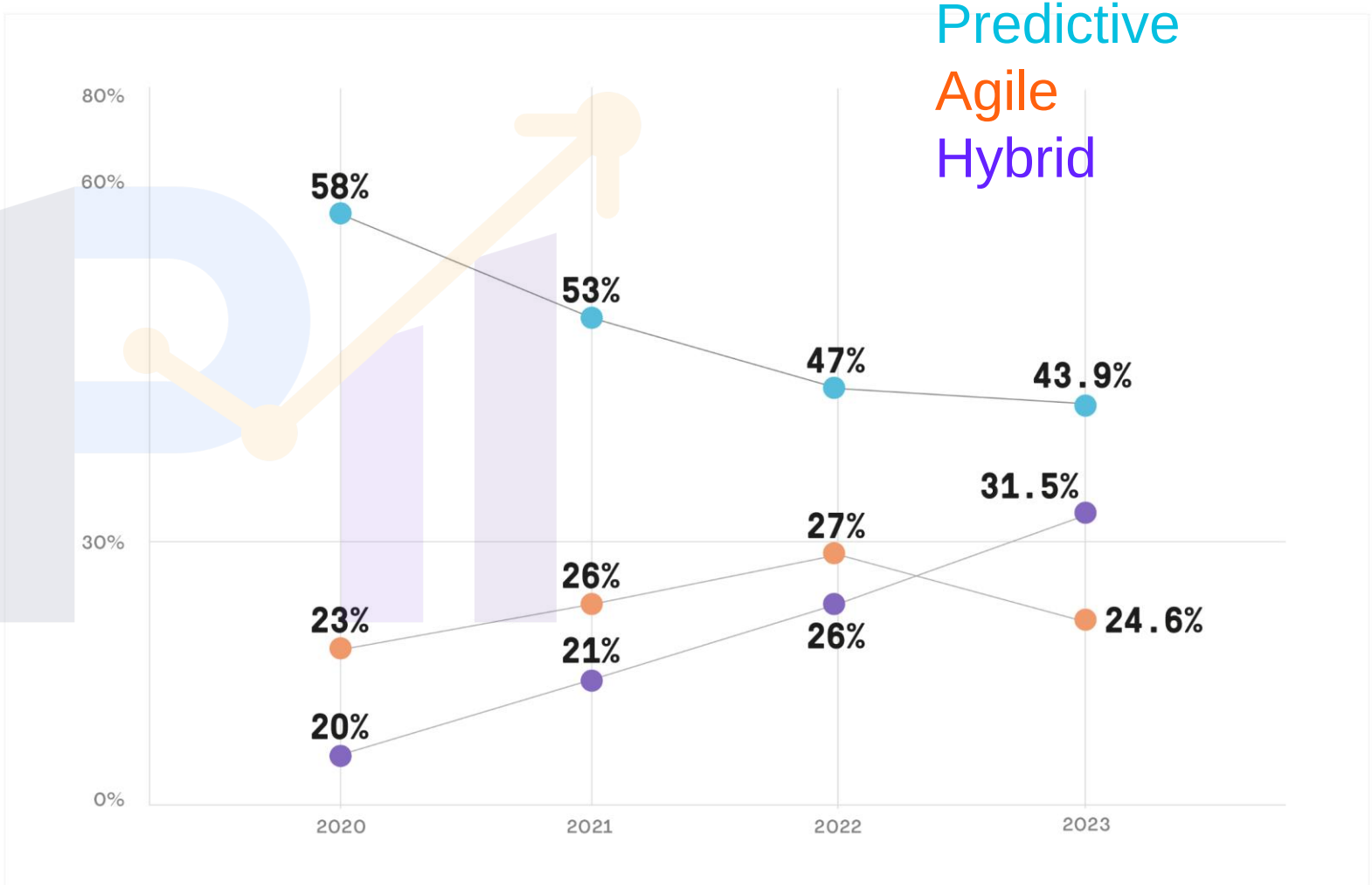
4B Tailoring the Project Development Approach and Life Cycle

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Real World Use of Project Management Approaches

"Our experts indicate a growing awareness that most projects and programs cannot be managed solely using either end of the predictive–agile spectrum"

— PMI. Pulse of the Profession 2024.



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Tailoring

The deliberate adaptation of the project management approach, governance, and processes to make them more suitable for the given environment and the work at hand.

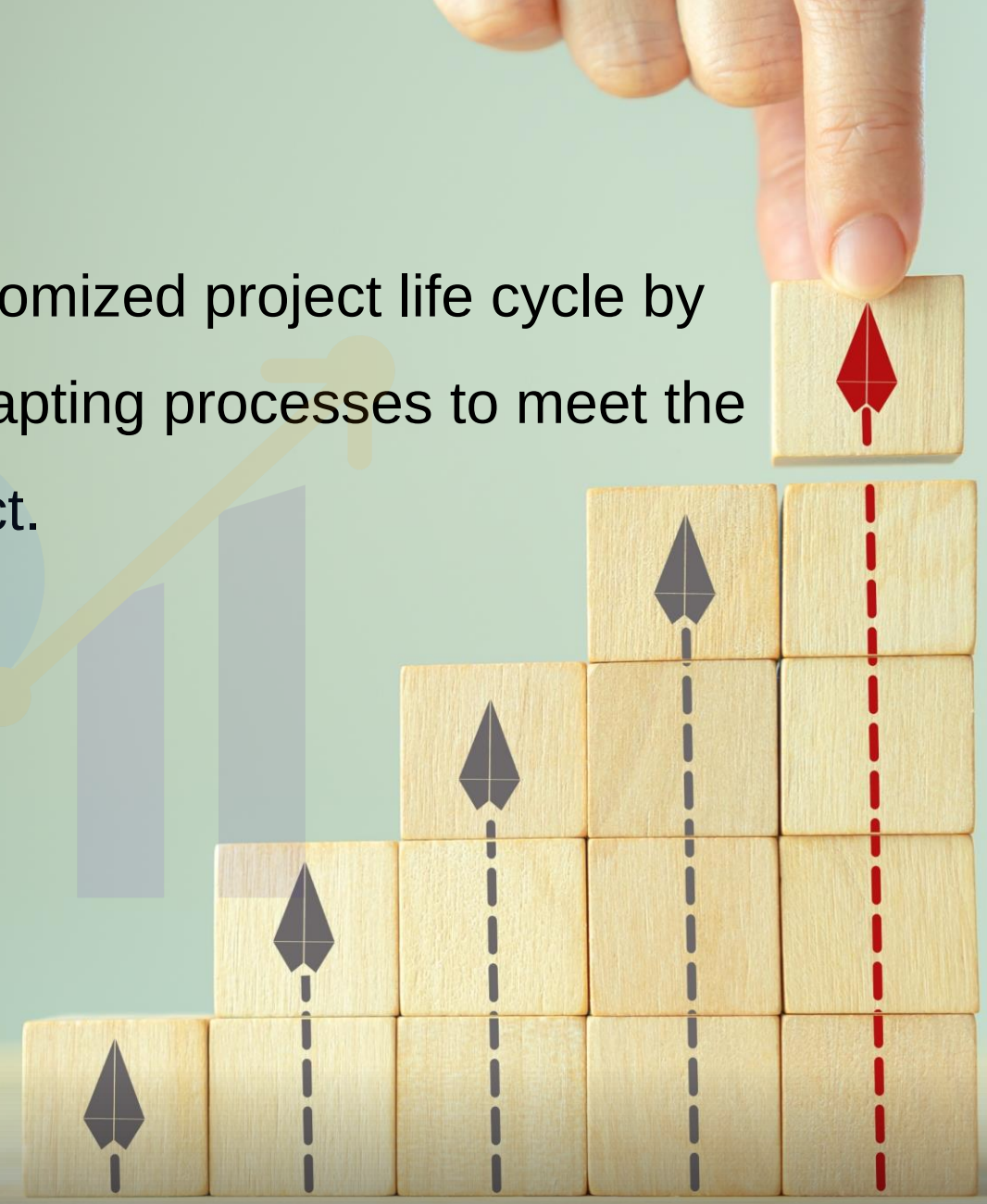


- Understand the **project context**, **goals**, and **operating environment**
- Aim to create a **practical operating environment** for the project

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Tailoring a Project Life Cycle

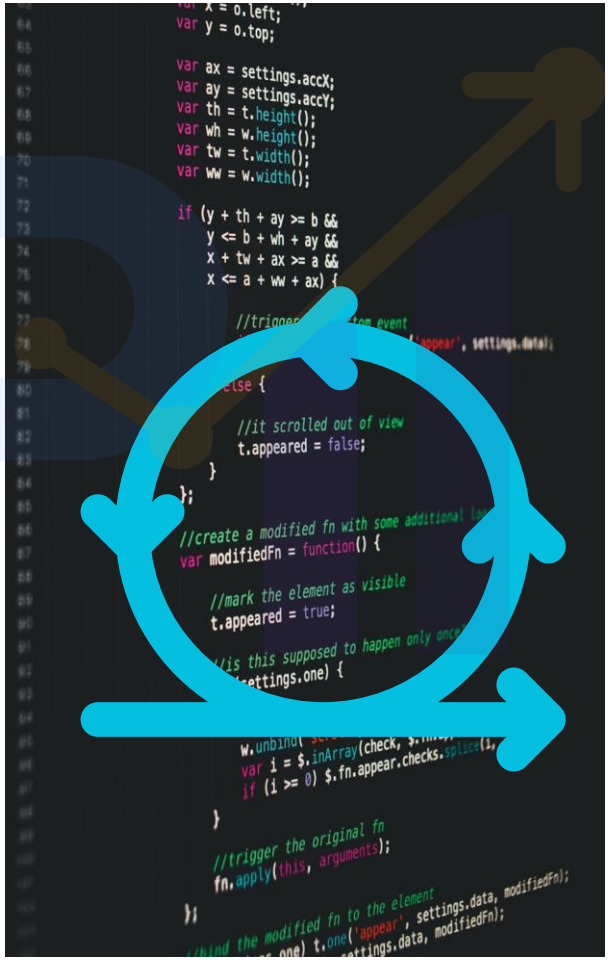
We create a customized project life cycle by selecting and adapting processes to meet the needs of a project.

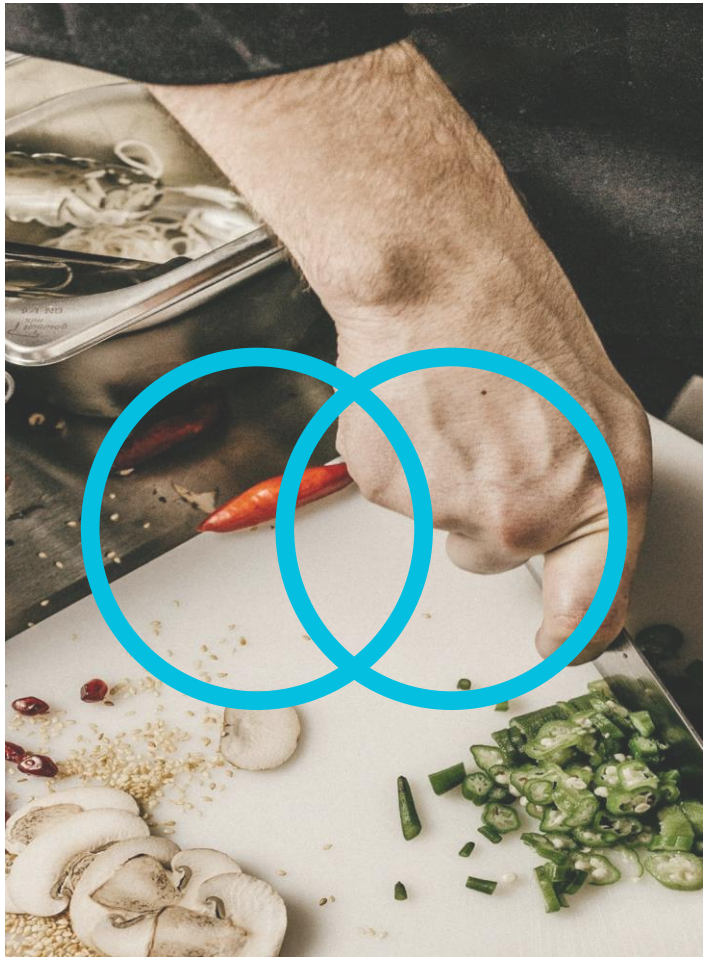


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Tailoring a Development Approach



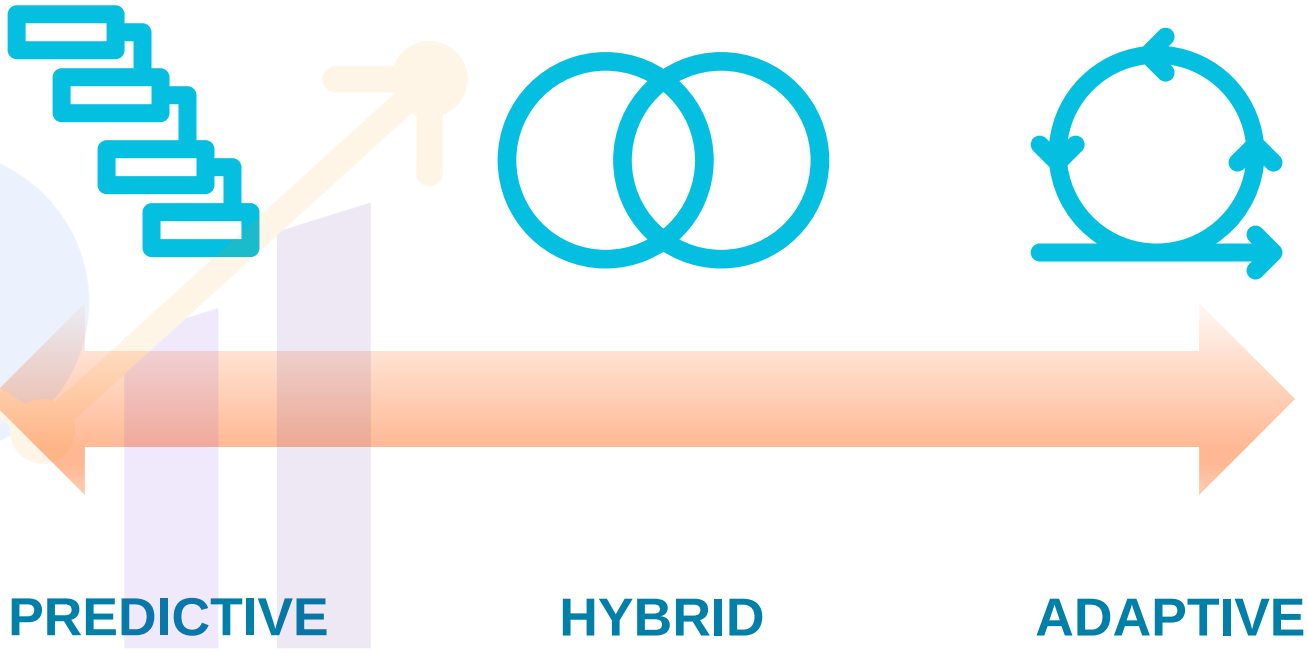




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Development Approach

*A method used to create and evolve a product, service, or result during the project life cycle, such as a **predictive**, **adaptive**, or **hybrid** method. The development approach can demonstrate specific characteristics, such as being **iterative** or **incremental**.*



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Predictive Development Approach



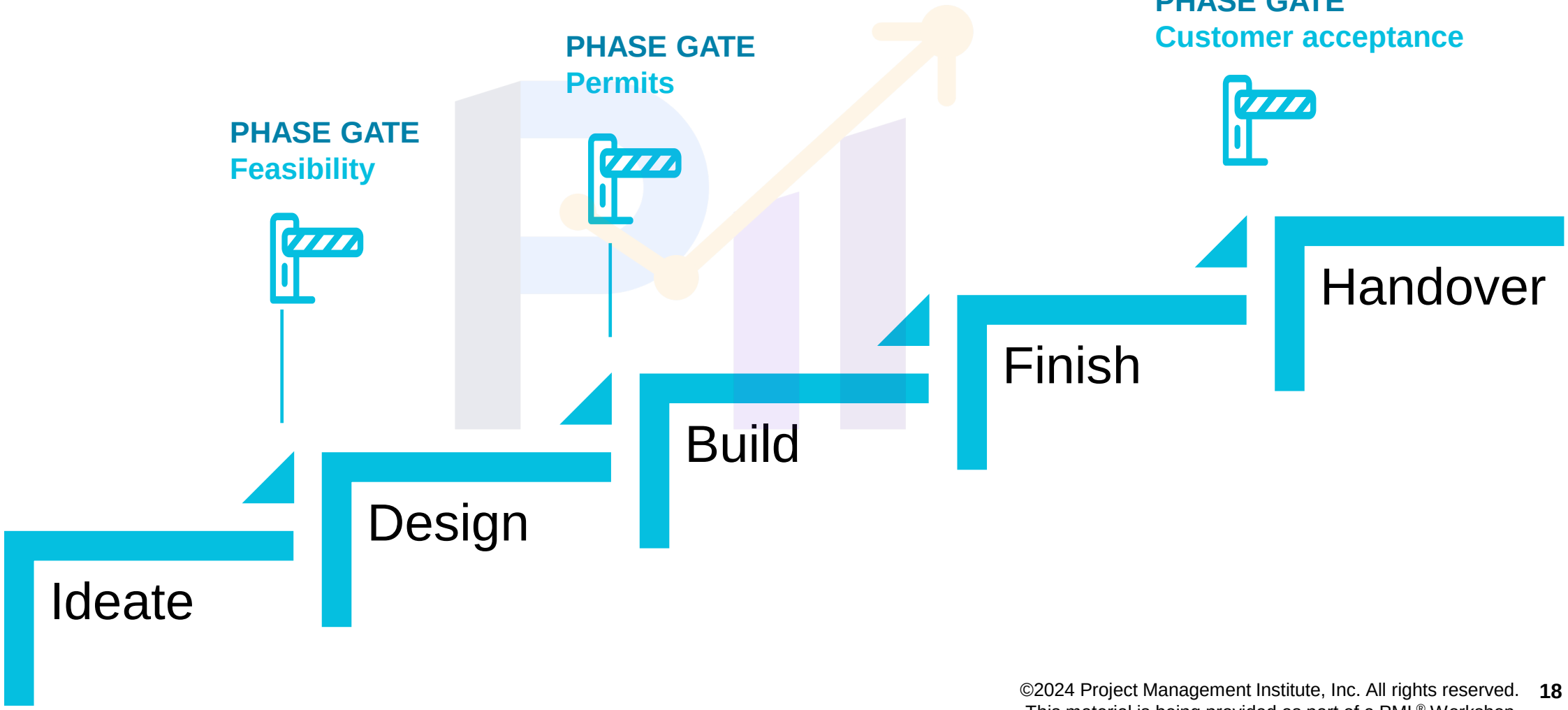
- Follows a generally **sequential structure** from start to finish
- Uses well-planned-out **steps**
- Delivers a single **output at the end of the project**

Tailor a predictive approach if:

- We have templates from previous, similar projects
- We can plan reliably at the start
- Scope, schedule, cost, and resource needs are stable and well-defined

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Predictive Life Cycle Example: Construction Project



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Adaptive Development Approach



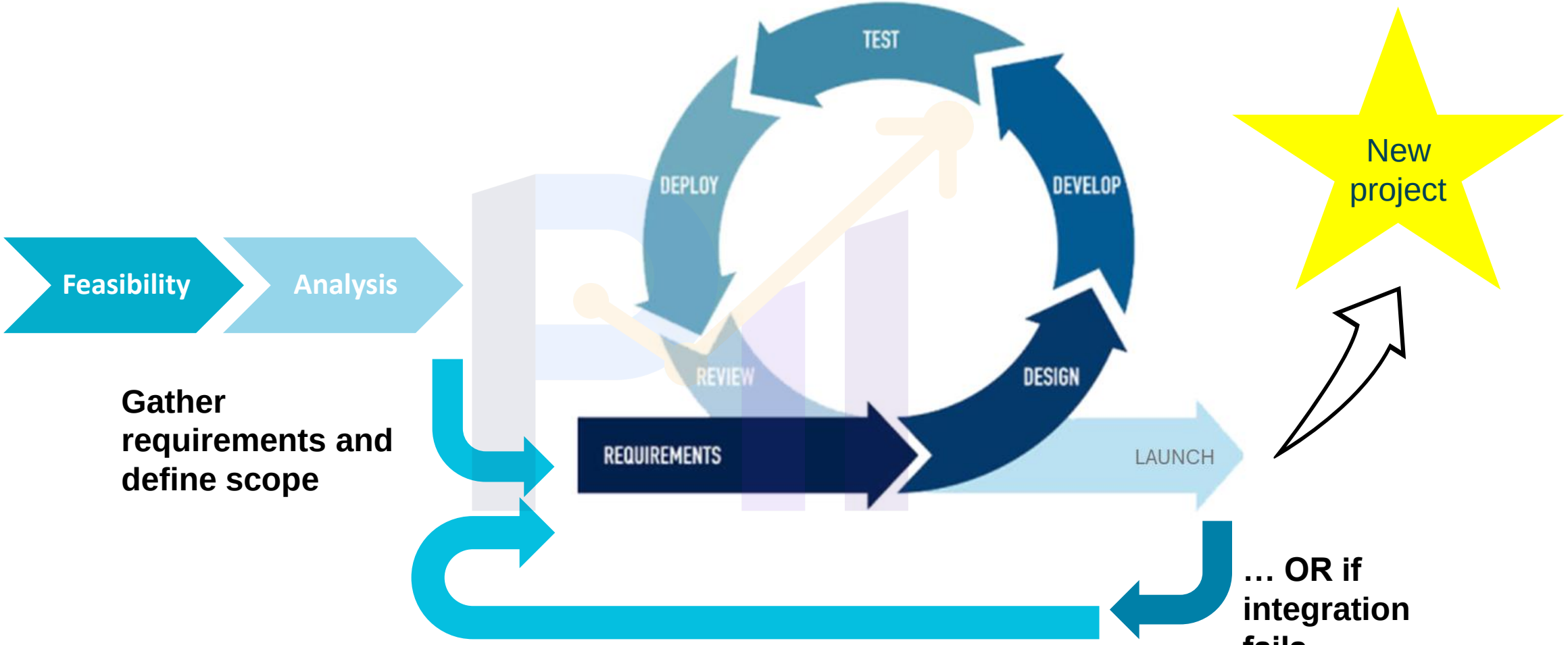
- Uses an **iterative approach** that repeats project phases
- Project moves to the next phase after **customer feedback**

Tailor an adaptive approach if:

- We don’t know the requirements **well at the beginning**
- We can count on requirements **changing**
- We need **frequent user feedback**
- We need flexibility to change, refine, and even replace requirements

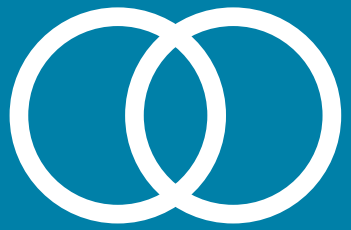
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Adaptive Life Cycle Example: Software Development



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Hybrid Development Approaches



Use any elements of **both** predictive and adaptive approaches

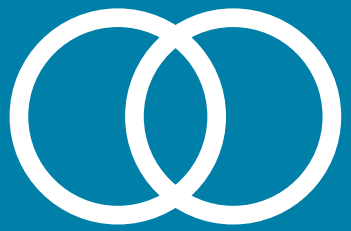
Tailor a hybrid approach if:

- We need to do a lot of research before starting work
- Requirements indicate that deliverable must be **implemented in a plan-based or predictable way**
- Project attributes suit elements of both predictive and adaptive approaches

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Hybrid Life Cycle Example:

Opening a Small Restaurant



Cook at Home

- Explore restaurant options
- Set the menu

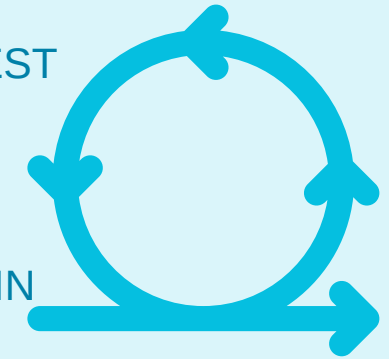
CONCEPT > RECIPE



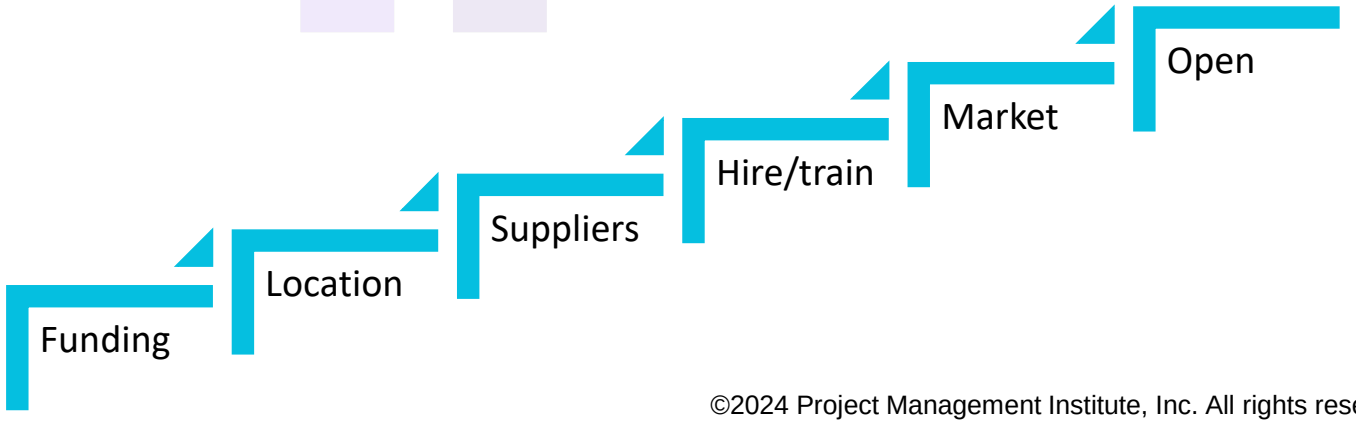
Rent a Kitchen

- Train additional chefs
- Confirm business availability

HIRE CHEFS >



Open a Restaurant



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Project Management Processes



PMI names and defines **49 processes**

We've listed them in the course glossary for you!

We manage the project life cycle by executing a series of project management activities known as **project management processes**.

We perform activities, converting inputs to outputs, within each process:

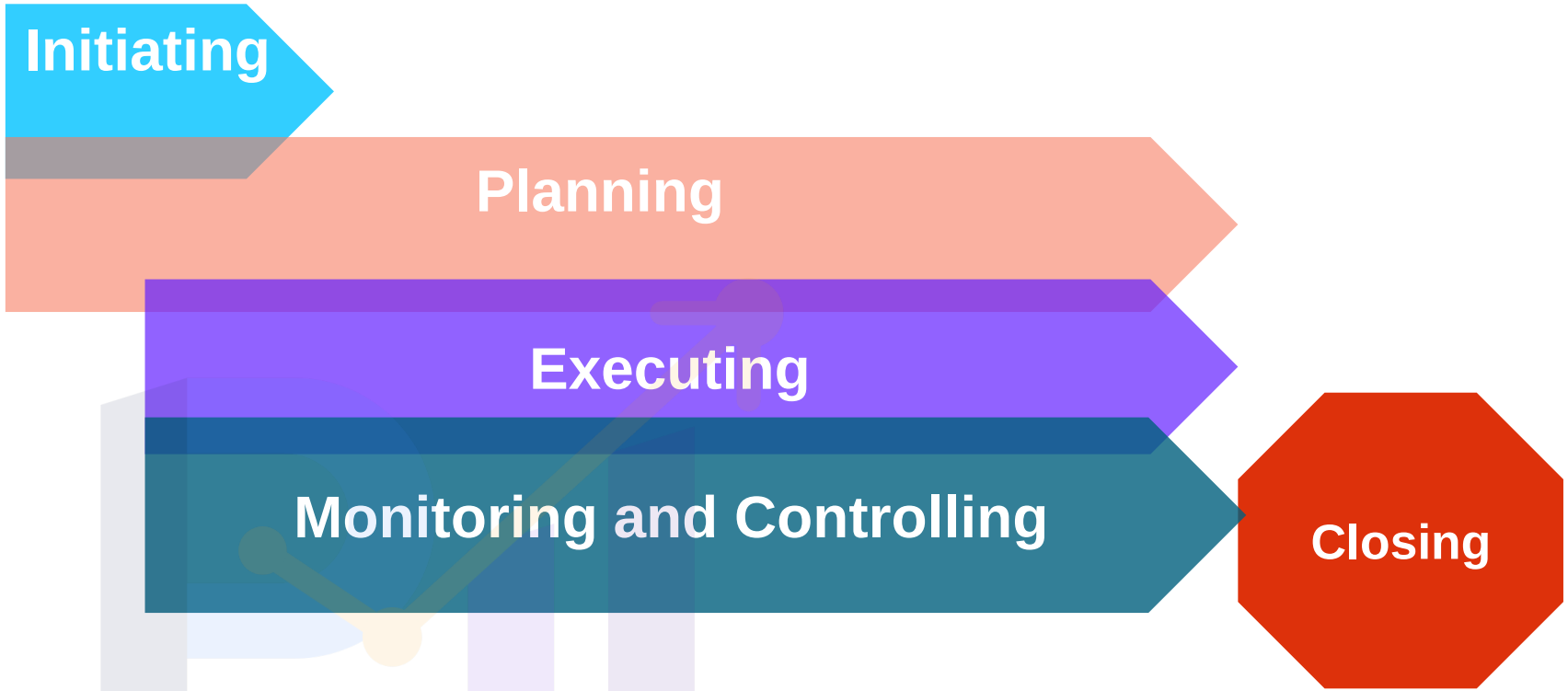
- We onboard team members … using **Acquire Resources**
- We estimate costs and figure out the budget ... using **Determine Budget**
- We track and prepare for risks … using **Manage Risk**

The Project Management Institute. *Process Groups: A Practice Guide.* (2022).

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The Five Process Groups

PMI good practice —**Tailor** to maximize value, manage constraints, and improve performance by using **"just enough" processes**, methods, etc.



- Don't confuse process groups with **project phases!**
- Use processes in any stage of any project life cycle
- Use **outputs** to create **inputs** for another process group
- **Tailor** the process groups used in a life cycle

The Project Management Institute. *Process Groups: A Practice Guide.* (2022)

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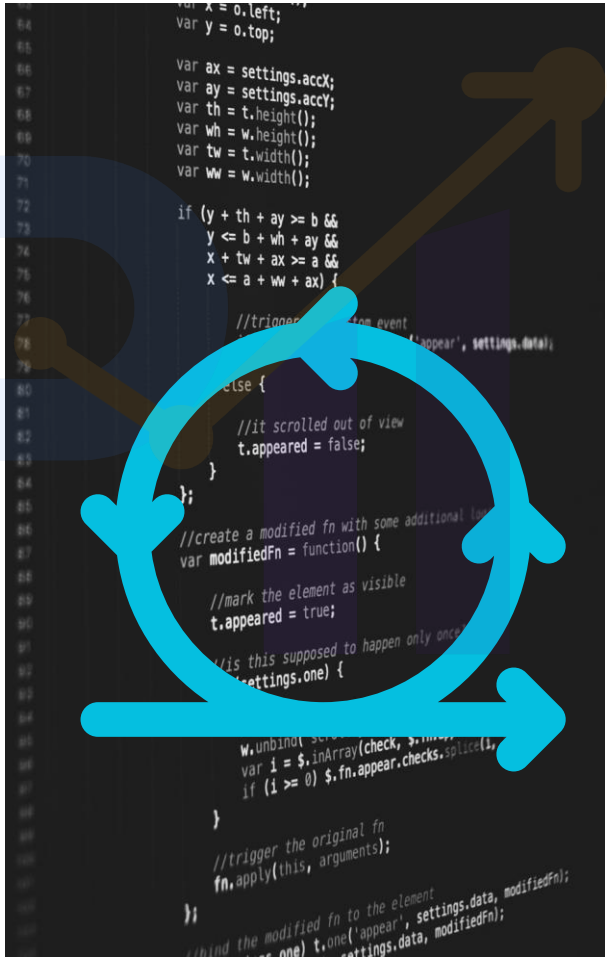


4C Project Activities, Deliverables, and Milestones

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Common Project Elements Across All Development Approaches







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What Is an Activity?

A distinct, scheduled portion of work performed during the course of a project.



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What Is a Deliverable?



Any unique and verifiable product, result, or capability to perform a service that is produced to complete a process, phase, or project.

A deliverable can be **tangible or intangible**

A project often delivers many deliverables …

and not only at completion!

Outputs of project management processes are also deliverables

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What Is a Milestone?

A specific point within a project life cycle used as a measure in the progress toward the ultimate goal.



- Used on product or project **roadmaps** or timelines
- Milestones **have no duration or assigned resources** on a schedule
- During planning and estimating, we assign a **target date** to each milestone.

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Knowledge Checks

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Question 1

The scope, schedule, cost, resource needs, and risks of a small construction project can be well defined in the early phases of the project, and they are relatively stable. Which approach should you use?



1. Predictive

2. Product

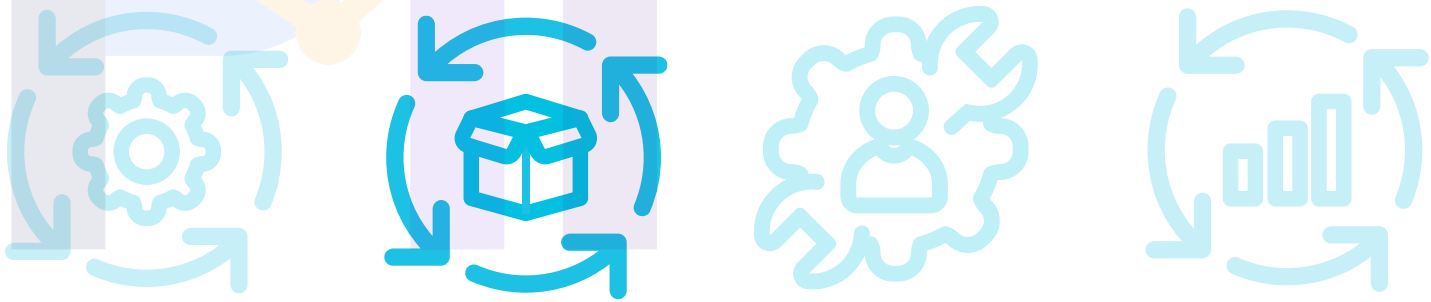
3. Adaptive

4. Hybrid

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Question 2

Executives of a widget company have decided that it's time to retire Widget 452 and bring Widget 673 into production and sales. These factors would lead you to believe that the executives are discussing a(n) _____?

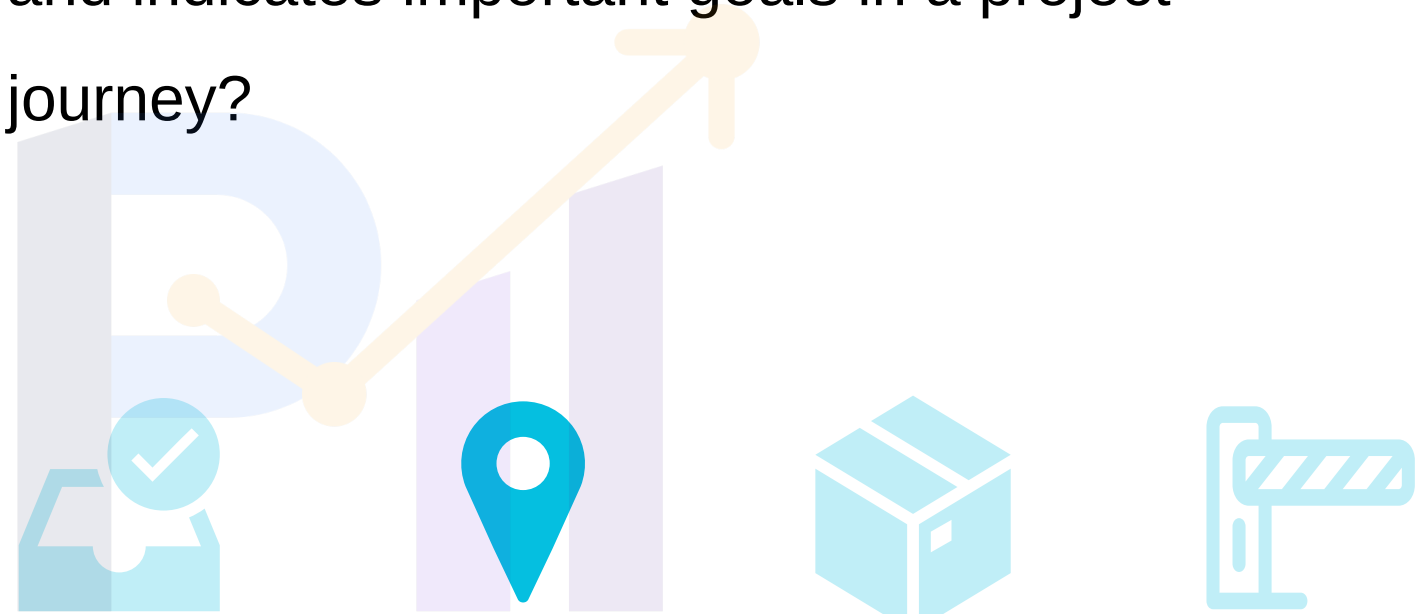


1. Phase
2. **Product life cycle**
3. Activity
4. Project life cycle

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Question 3

Which project component is used on roadmaps and indicates important goals in a project journey?



1. Activity
2. **Milestone**
3. Deliverable
4. Phase gate

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Wrapping Up

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Summary

4A Fundamentals of the Project Life Cycle

4B Tailoring the Project Life Cycle and Development Approach

4C Project Activities, Deliverables, and Milestones



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Up Next:

Business Analysis Framework

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