Project Management Fundamentals

أساسيات إدارة المشروعات

PMF

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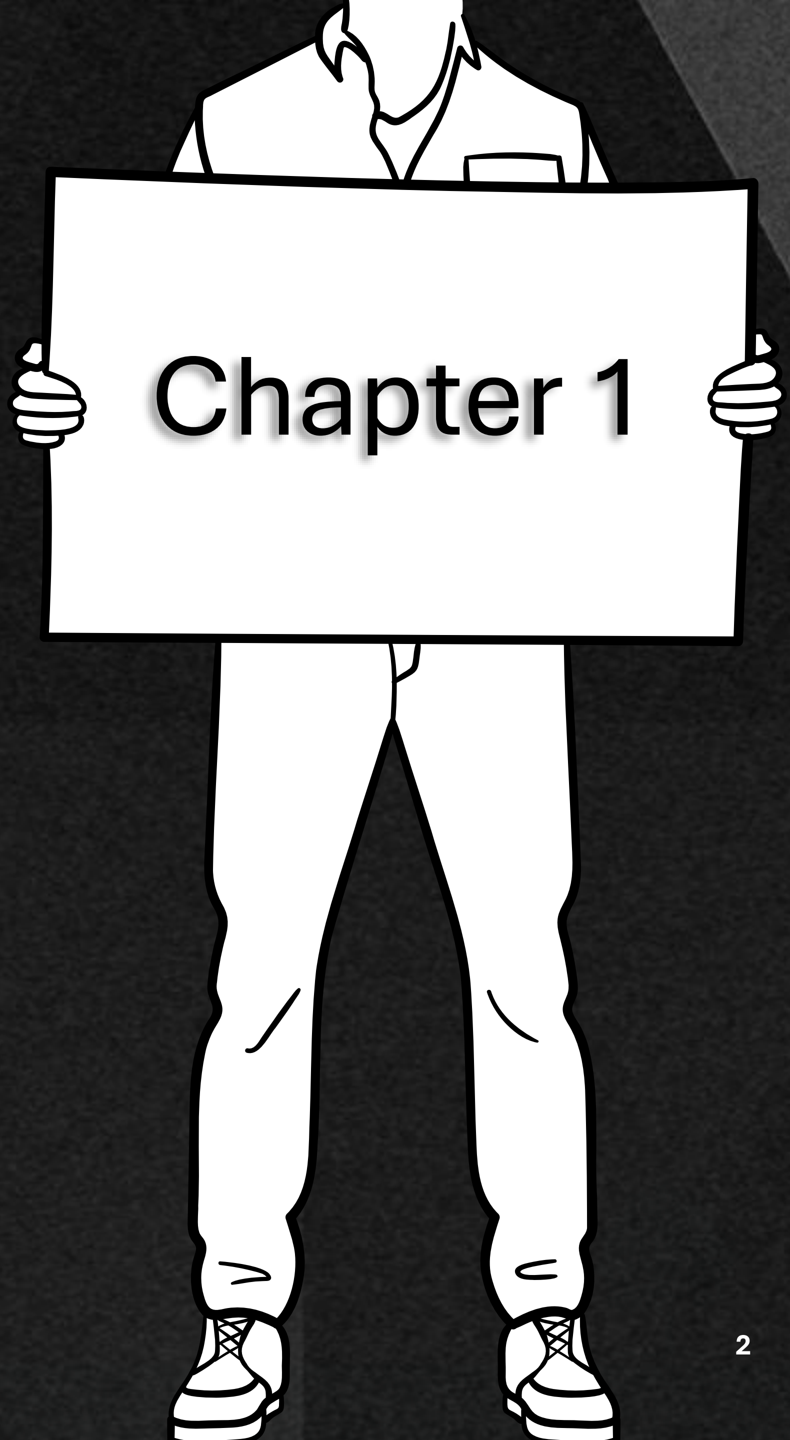
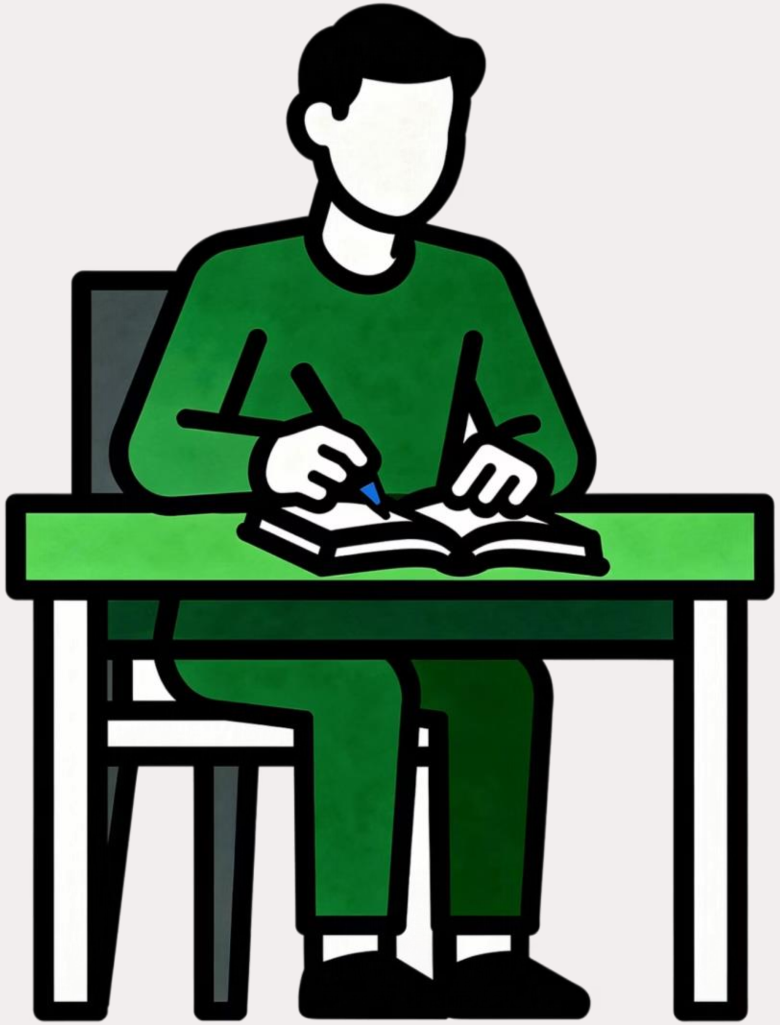
NASERGY

Introduction





What You Will Learn

Set Goals

Achieve goals and decide if they're worth your effort

Plan Ahead

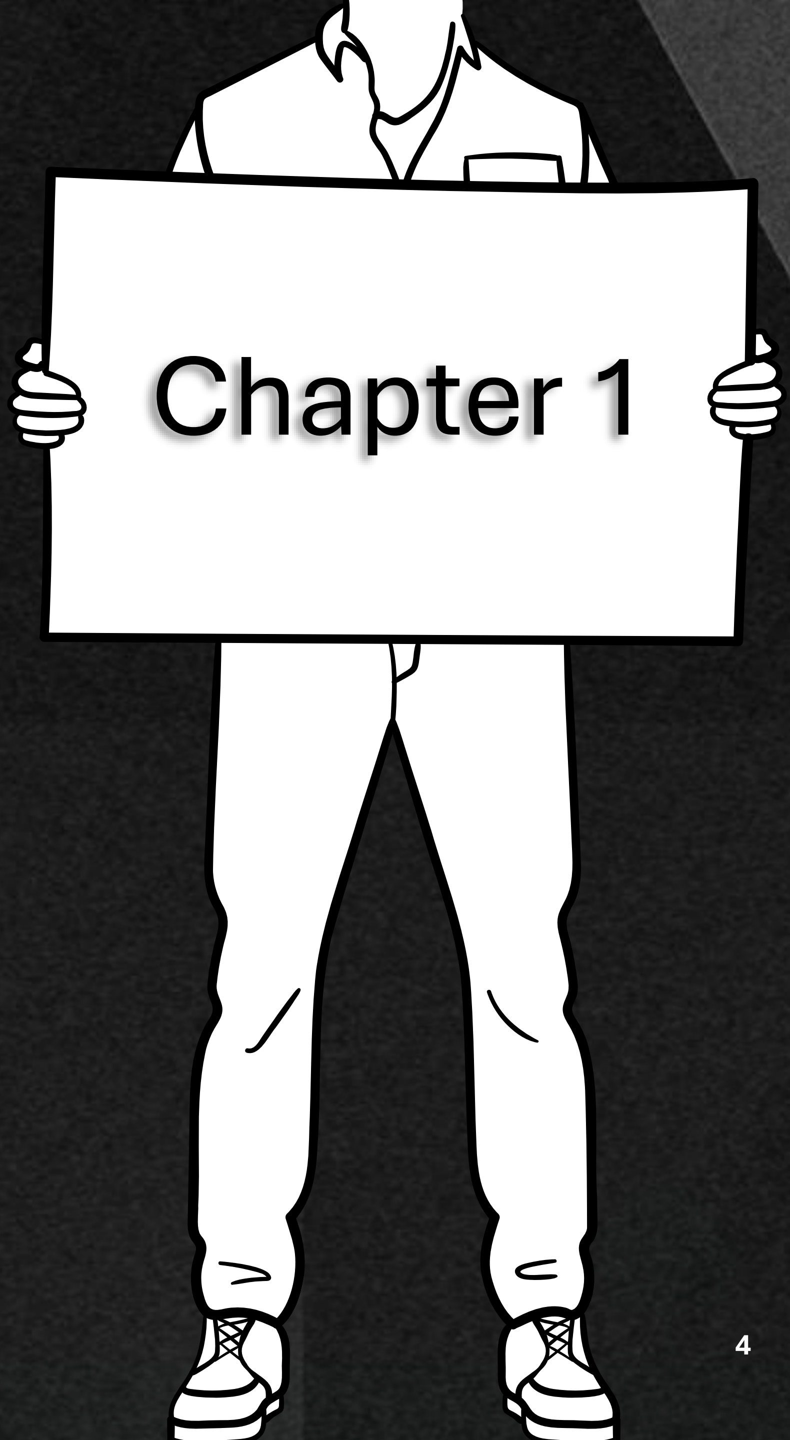
Break big jobs into smaller objectives and follow a plan

Stay Flexible

Deal with unknowns and adapt to changes

Stay in Control

Monitor the progress and control works



Introduction

Introduction to Project Management

Your Turn

1. What is your name?
2. Your work dream?
3. What do you hope to get from this course?

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Key Terminology

Project

A temporary endeavor that produces a unique result

Project Management

The approach, tools, and techniques techniques used to meet a project's project's goals

Project Manager

The person in charge of planning planning and executing the project project

Sponsor

Funds and oversees the project manager

Stakeholder

Anyone involved in or affected by the project

Customer

Provide requirements and approve deliverables

Characteristics of a Project

A Project IS

- Has a clear beginning and end
- Creates a unique end result
- Involves people, time, budget, and interrelated tasks

A Project is NOT

- Simple enough to do without a plan
- Regular, repeated, routine work
- An activity with no result

A project is temporary, and it produces something.

Practice

Is it a Project or Operation

Projects ✅	Not Projects ❌

- Moving into a new home
- Writing a research paper
- Brushing your teeth every night
- Listening to a weather report
- Answering the telephone
- Preparing and serving a meal

The Project Manager

- **Plan the Project**

  Define scope, timeline, and resources

- **Follow the Plan**

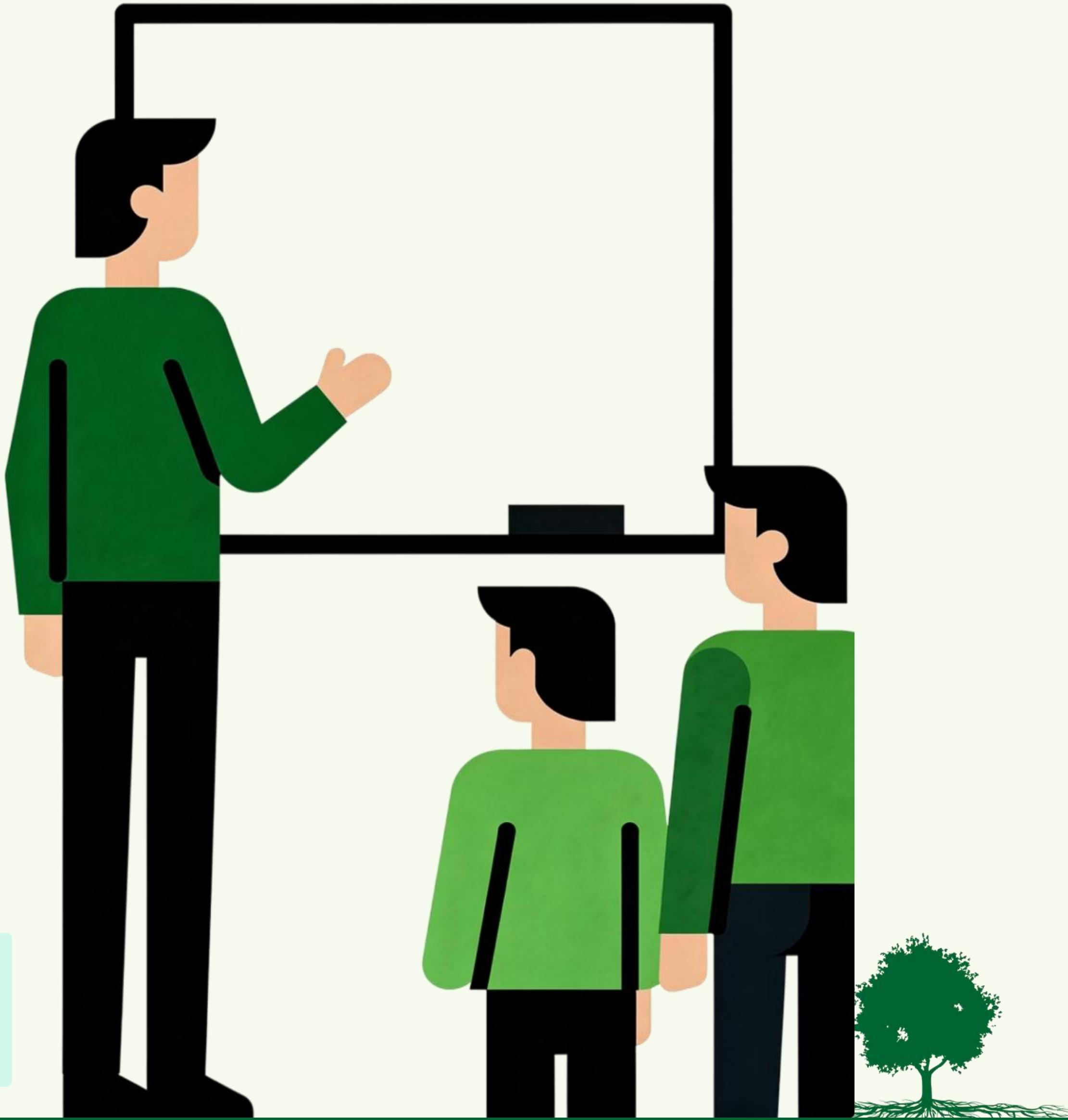
  Keep the project on track and on schedule

- **Respond to Changes**

  Adapt when things don't go as expected

- **Communicate**

  Keep everyone involved informed and aligned



Take ownership of your project.

Project Management

An approach to managing and controlling a project — a set of **knowledge, skills, tools, and and techniques** that help meet a project's goals.

Follow a known approach that makes projects successful.

Knowledge	Skills	Tools	Techniques

Project Management Phases

Initiating

Define project purpose purpose and stakeholders

Executing

Deliver project work and coordinate teams

Planning

Develop scope, schedule, and budget

Closing

Formalize acceptance and handoff

These five groups form the backbone of every successful project — from the first idea to the final handoff.

The Sponsor/Customer

Funds the Project

Provides budget and may supply other resources

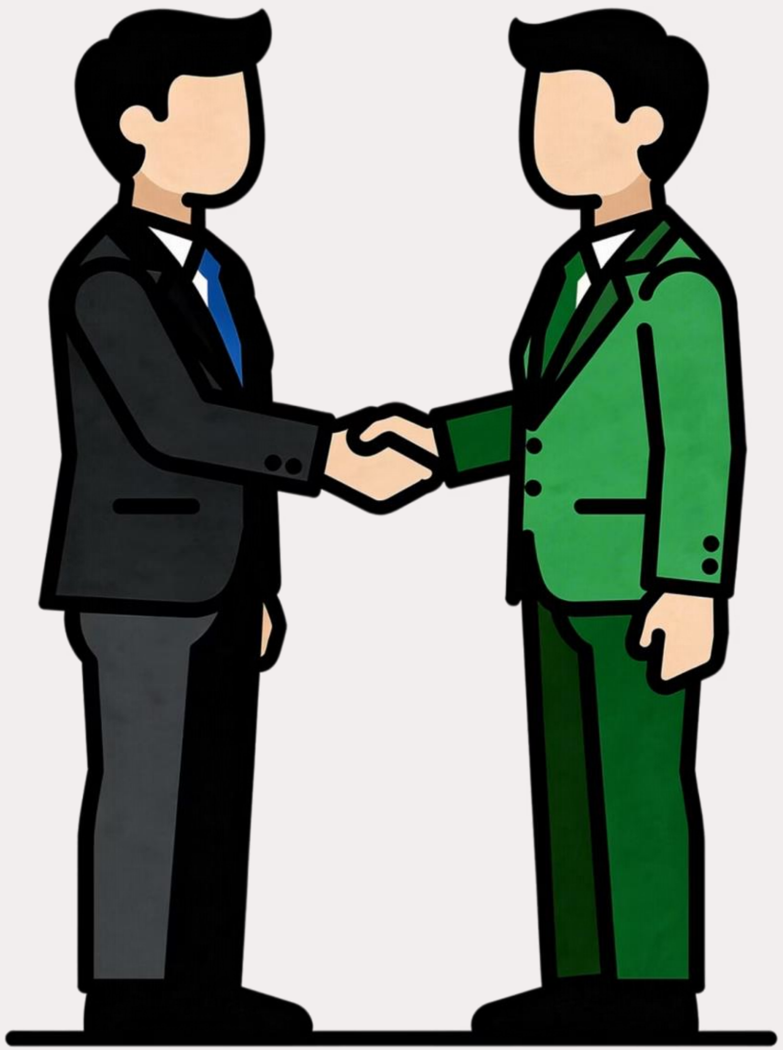
Oversees & Promotes

Supervises the project manager manager and champions the project

Examples

Executive team member, Board Chair, or Executive Director of a community community organization

Be accountable to someone who cares.



Stakeholders

Stakeholders can be **people or organizations** — involved or simply interested, supportive or opposed. opposed. They may care about the project itself or just its outcome.

Your project impacts more people than you might think!

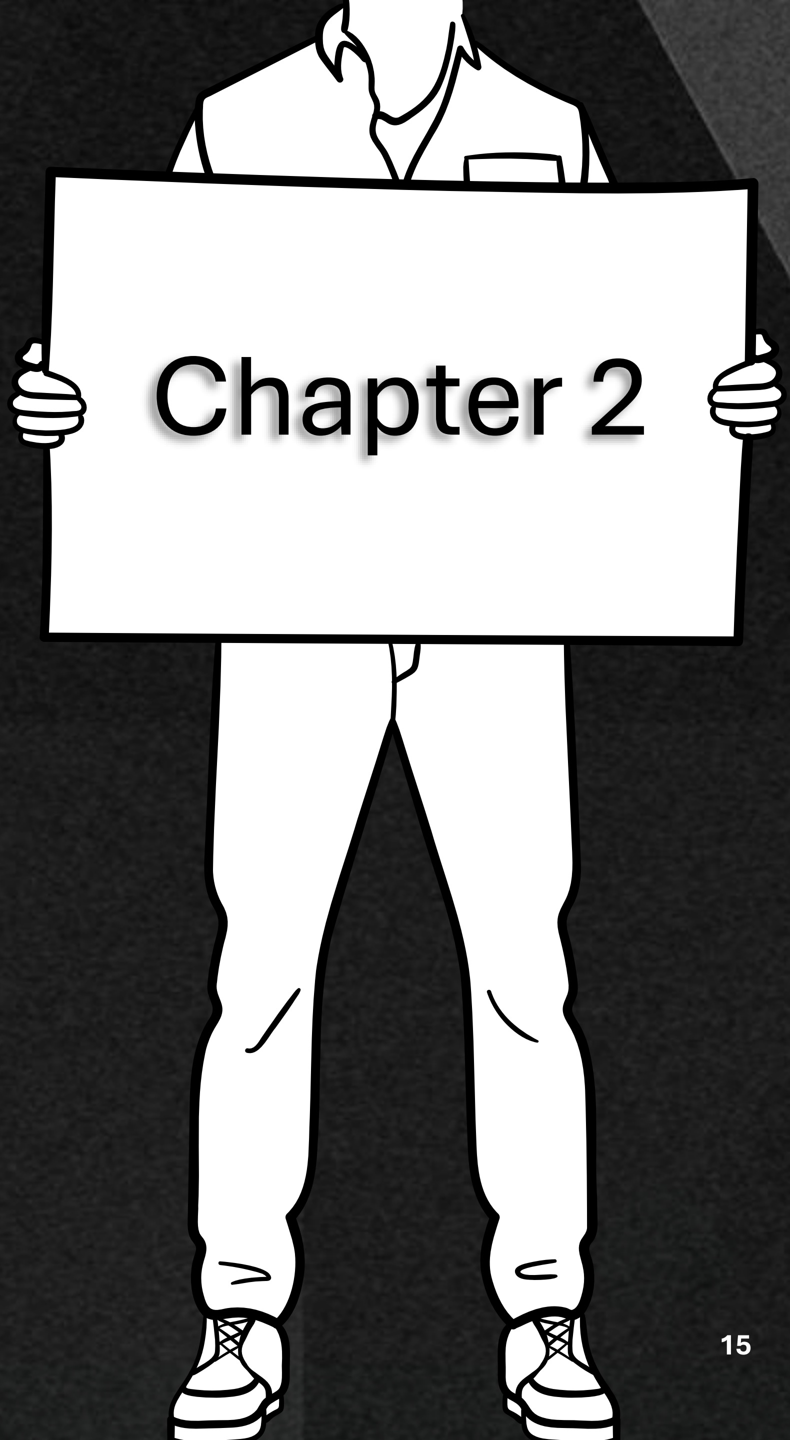
Internal

Shareholders, Employees, Management

External

Customers, Suppliers, Partners, Competitors

Initiating Phase



Project Management Fundamentals

A practical introduction to the language, structure, and process groups that guide every successful project — from initiation to close.

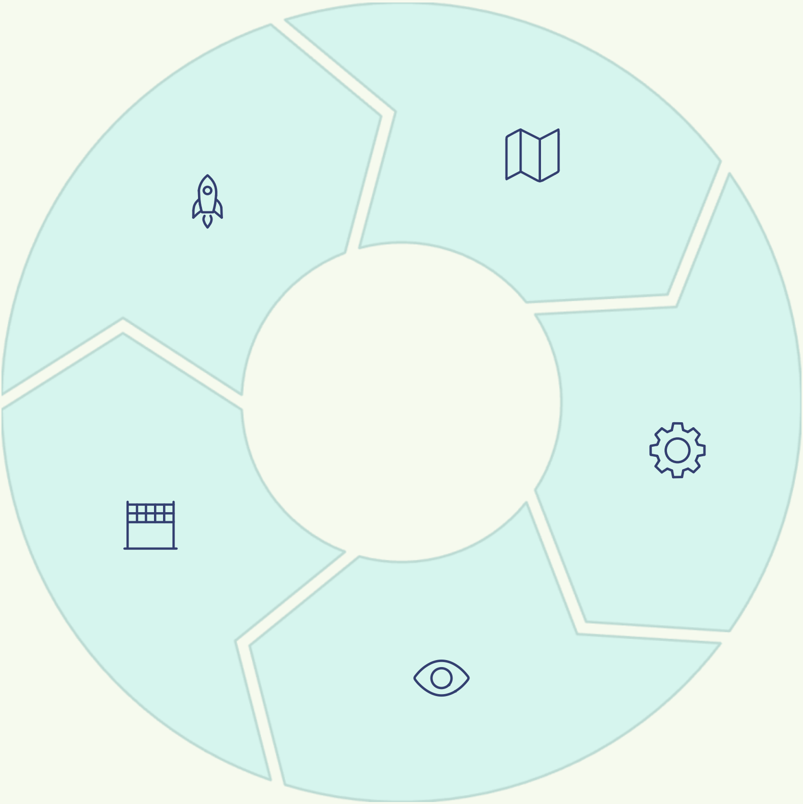
The Five Process Groups

Initiate

Decide to do it

Plan

Determine how to do it



Execute

Do it

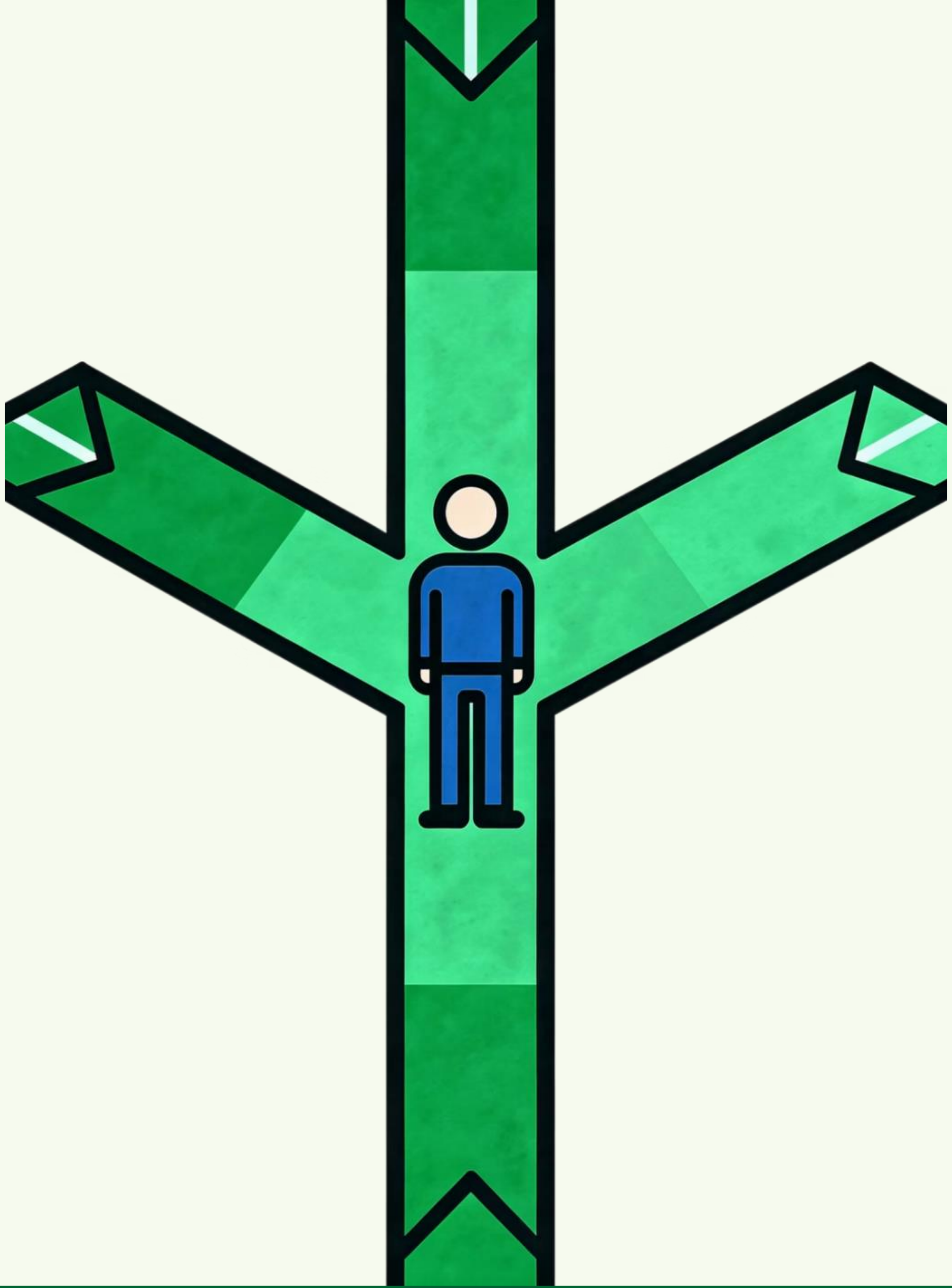
Close

Wrap it up

Monitor & Control

Adapt to change

These five groups form a continuous cycle — Monitor & Control runs throughout, keeping the project on track at every stage.



Initiating: Before You Commit

Initiating happens **before** you commit to the project. The goal is simple: make sure your project is worth doing.

1. **Think About It**
2. **Write It Down**
3. **Reach Agreement**

Think About It: What to Decide

Vision & Purpose

Why you are going to do it

Success Criteria Criteria

What it means to finish

Milestone Schedule

How long it will take

Think About It: Who's Involved

Stakeholders

Who is affected by the project

Project Manager

Who will run the project

Sponsor/Customer

Who will pay for the project

Write It Down: The Project Charter

If it's worth doing, it's worth writing down.

- Develop a common understanding among stakeholders
- Give people a sense of ownership
- Capture what the team decided
- Onboard new team members quickly
- Keep it **high-level** and **concise**

Reach Agreement

Start with agreement — a solid foundation for your project.

01

Promote the Charter

Present to the sponsor and stakeholders; modify if needed.

02

Get Commitment

Secure resources — money, supplies, and people.

03

Get Authorization

Receive formal approval to start the project.

The Initiation Flow

Think About It | **Write It Down** | **Reach Agreement**

Following this sequence ensures every project begins with clarity, alignment, and the resources needed to succeed.

Your Turn

ACTIVITY

1

Select a Project

Choose an example project to work with.

2

Discuss Each Element

Walk through every component of the project charter.

3

Draft the Charter

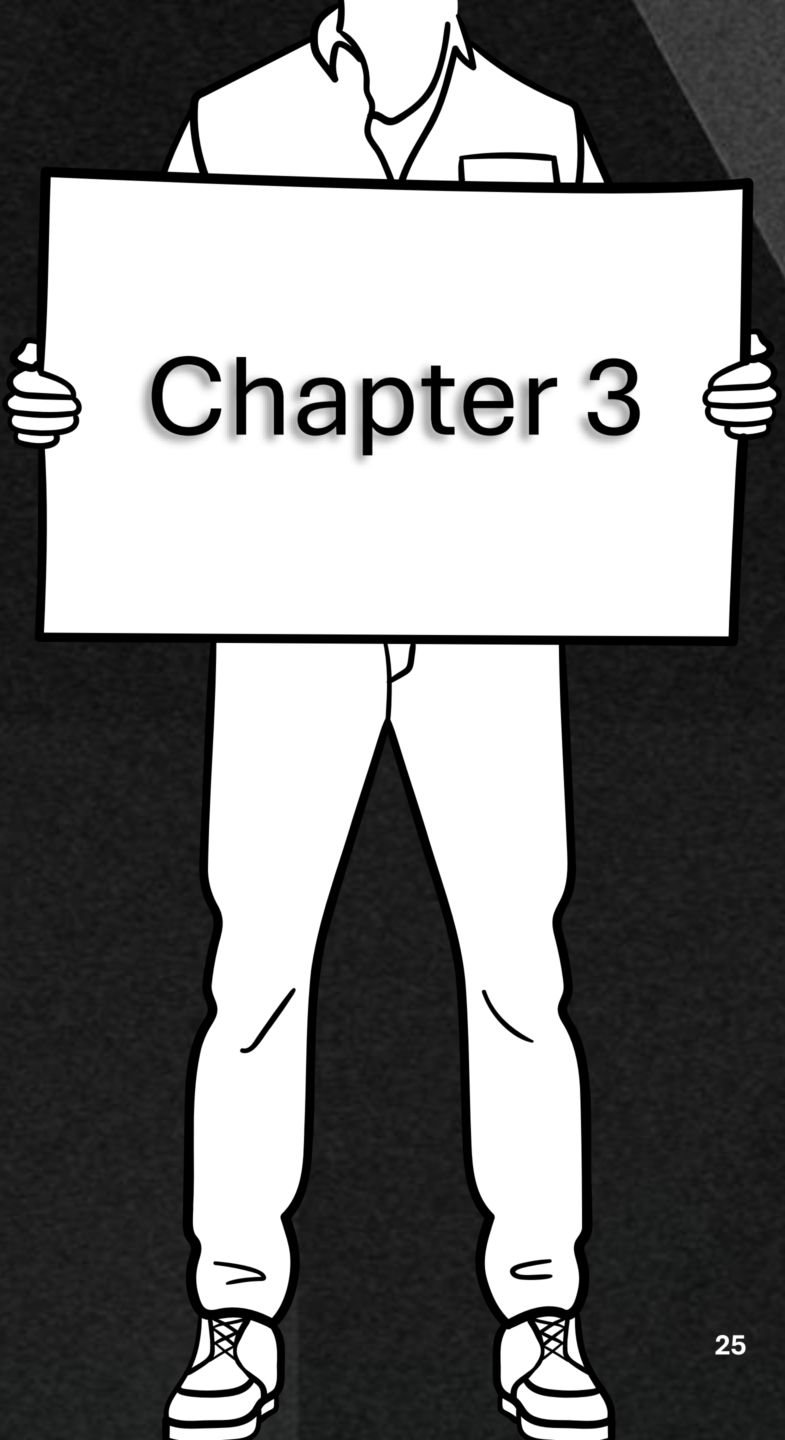
Write a draft project charter as a group.

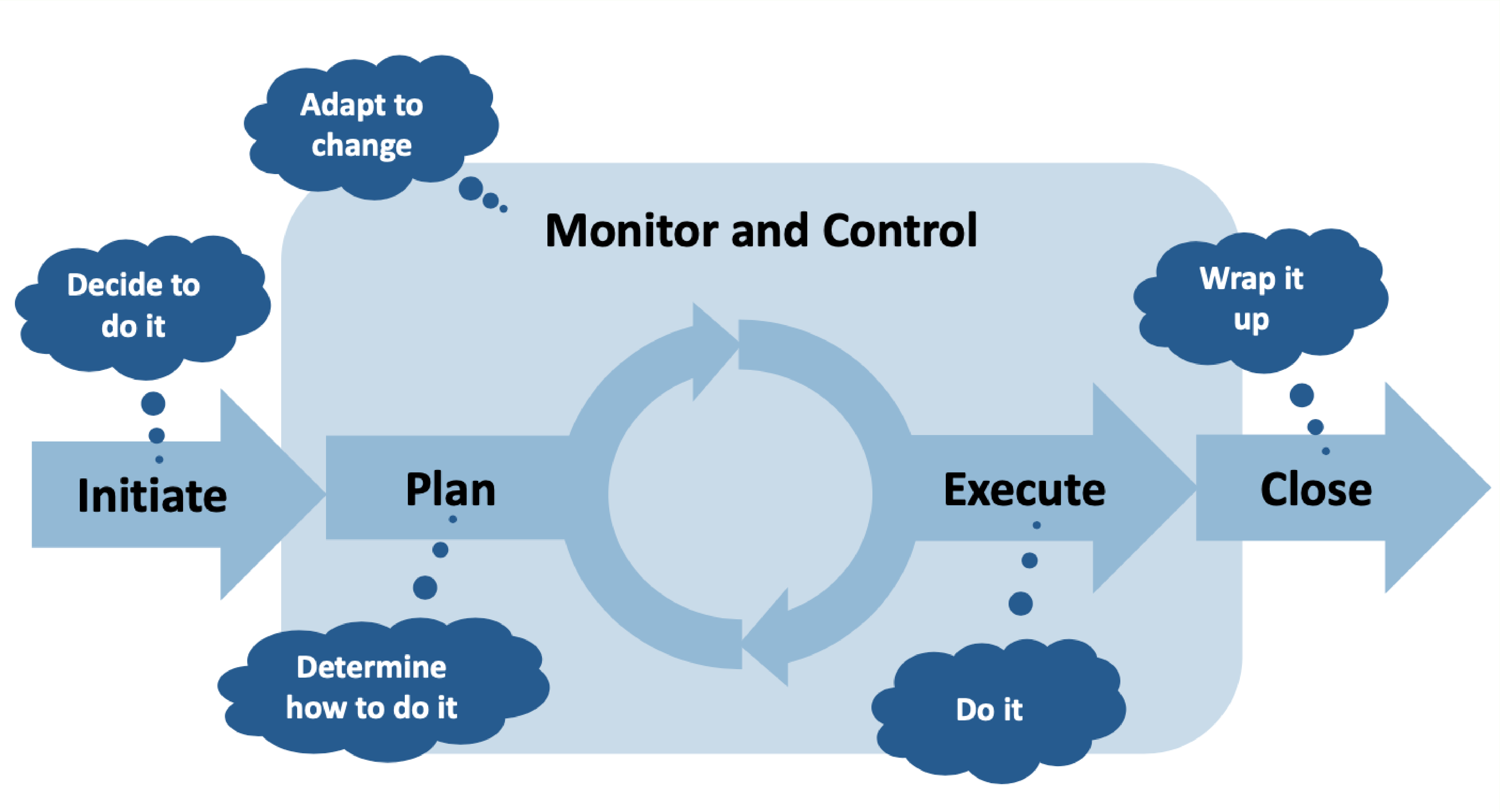
4

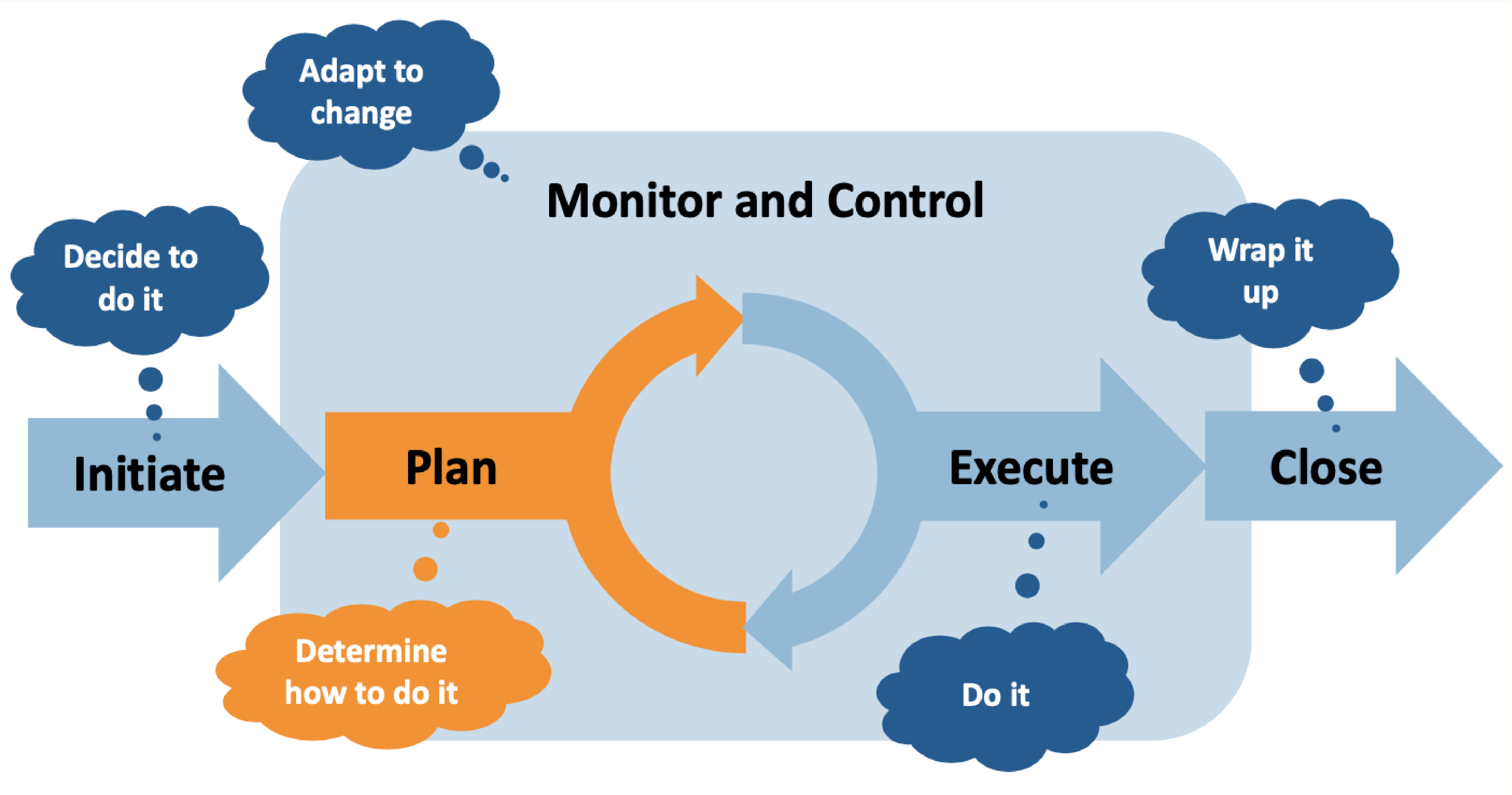
Share with the Group

Be ready to present your experience and findings.

Planning Phase




Adapt to change
Monitor and Control
Decide to do it
Wrap it up
Initiate
Plan
Execute
Close
Determine how to do it
Do it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A Plan Fits the Pieces Together

Every project has interconnected constraints. A solid plan aligns all of them before work begins.

Scope	**Time**	**Cost**	**Quality**
Risk	**Purchasing**	**People**	**Communication**

Plan Scope

What we will do, what we will not do, assumptions, constrains, success criteria

1- Collect Requirements

Define your end result clearly before work begins. Here's how a simple painting project captures both outputs and constraints.

Project Outputs

- Paint the bedroom
- Ceiling: white flat
- Walls: blue satin
- Trim: blue semi-gloss

Constraints

- No holes in the walls
- Work hours: 8:00am – 5:00pm
- Completed within one week
- Dispose of empty cans
- Save leftover paint for the owner

3- Scope Statement

Write down all the project scope.

What will be done	What will NOT be done	Acceptance Criteria

2- Work Breakdown Structure

A WBS organizes all project work into three clear phases — each with defined activities and outputs.

1. Prepare

Select colors, purchase materials, prepare room surfaces

2. Apply Paint

Apply first coat, allow to dry, apply second coat

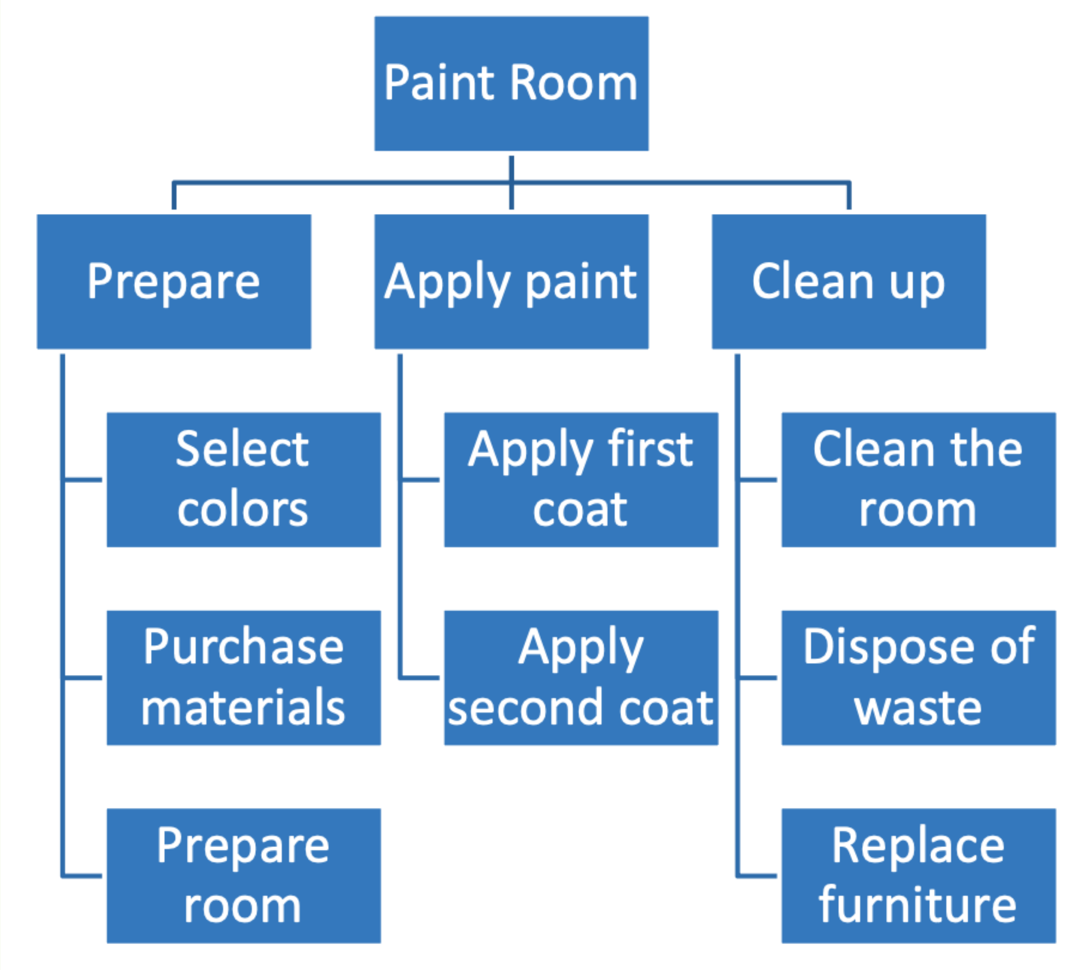
3. Clean Up

Clean the room, dispose of waste, replace furniture

WBS EXAMPLE

Scope

Work Breakdown Structure: Paint Room



Plan Scope: Your Turn

Apply what you've learned to your own project. Work through these three steps to define your scope.

1

Collect Requirements

Define the outputs of your project in detail — what will be delivered and to what standard?

2

Scope Statement

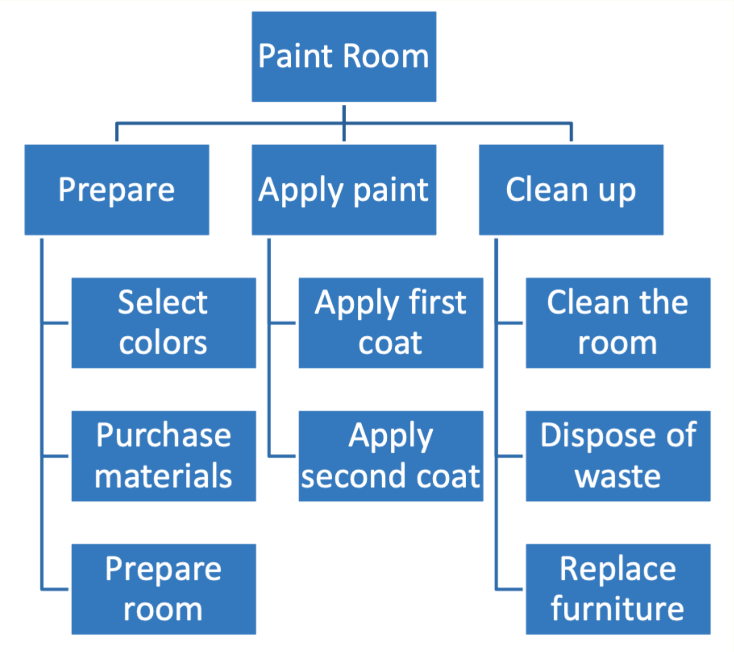
Document how the work is to be done — time, cost, quality, and process boundaries.

3

Create a WBS

Break down the work into manageable elements with clear inputs, activities, and outputs.

Creating Activities



Activity

Remove furniture

Clean walls

Repair holes

Cover unpainted areas

Schedule

Plan Schedule

Activities

↓

Order

↓

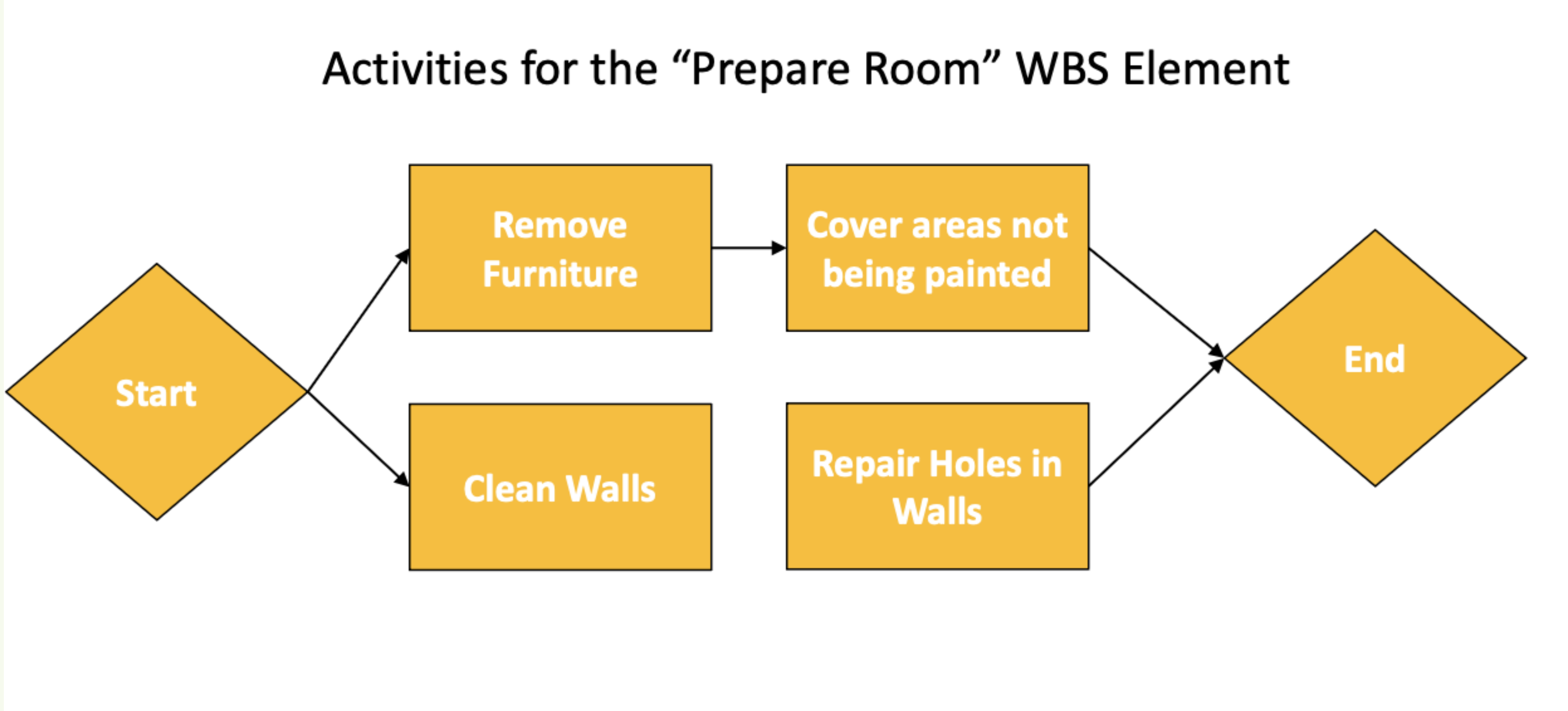
Duration

Steps to Plan Schedule

1. Define detailed activities for each WBS element
2. Sequence the activities
3. Estimate calendar time (days or weeks)
4. Estimate labor and supplies for each activity
5. Create a schedule

Example Schedule: Activity Sequence

A network diagram shows how activities connect, which can run in parallel, and how they flow toward completion.



Parallel activities save time. Identifying dependencies upfront prevents bottlenecks during execution.

Create Schedule

Example Activity List: Prepare Room

Activity	Labor	Resources
Remove furniture	1 hr	Storage space
Clean walls	1 hr	Bucket, sponge, soap
Repair holes	2 hrs	Spackle, sandpaper
Cover unpainted areas	2 hrs	Tape, drop cloths

Plan Schedule: Your Turn

Build out your project schedule step by step.

01

WBS to Activities

List every activity needed to complete your project's work elements.

02

Sequence Activities

Determine the order of work — which activities must finish before others can start?

03

Identify Resources

Determine the labor and supplies required for each activity.

04

Estimate Time

Assign a duration to each activity in days or hours.

05

Build the Schedule

Develop a complete project schedule showing start and end dates.

PLAN PHASE

Plan Cost: Estimate Your Project

What to Estimate

- **Labor** — time and people
- **Supplies** — materials and equipment
- **Overhead** — office space, shared equipment

Add all estimates together to determine the **total project cost**.

Example: Prepare Room Activities

Activity	Labor EGP	Supplies EGP
Remove furniture	EGP20	—
Clean walls	EGP20	EGP5
Repair holes	EGP50	EGP10
Cover areas	EGP50	EGP70

Plan Cost & Quality: Your Turn

Plan Cost

Estimate the cost of labor and supplies for each activity in your project. Sum them to determine total project cost.

Plan Quality

Define what quality means for your project — and how you will ensure it is met.

Quality means: Smooth walls, full paint coverage, carpet free of damage
How to ensure: Inspect spackle before painting; inspect after each coat; cover and inspect carpet

PLAN PHASE

Plan Risk: Identify, Assess & Plan

Risks are uncertain future events that can affect your project. **Threats** have a negative impact; **Opportunities** have a positive impact.

Identify

Talk to others and make a list of potential risks — both threats and opportunities.

Assess

Probability: How likely?
Impact: How significant if it occurs?

Plan

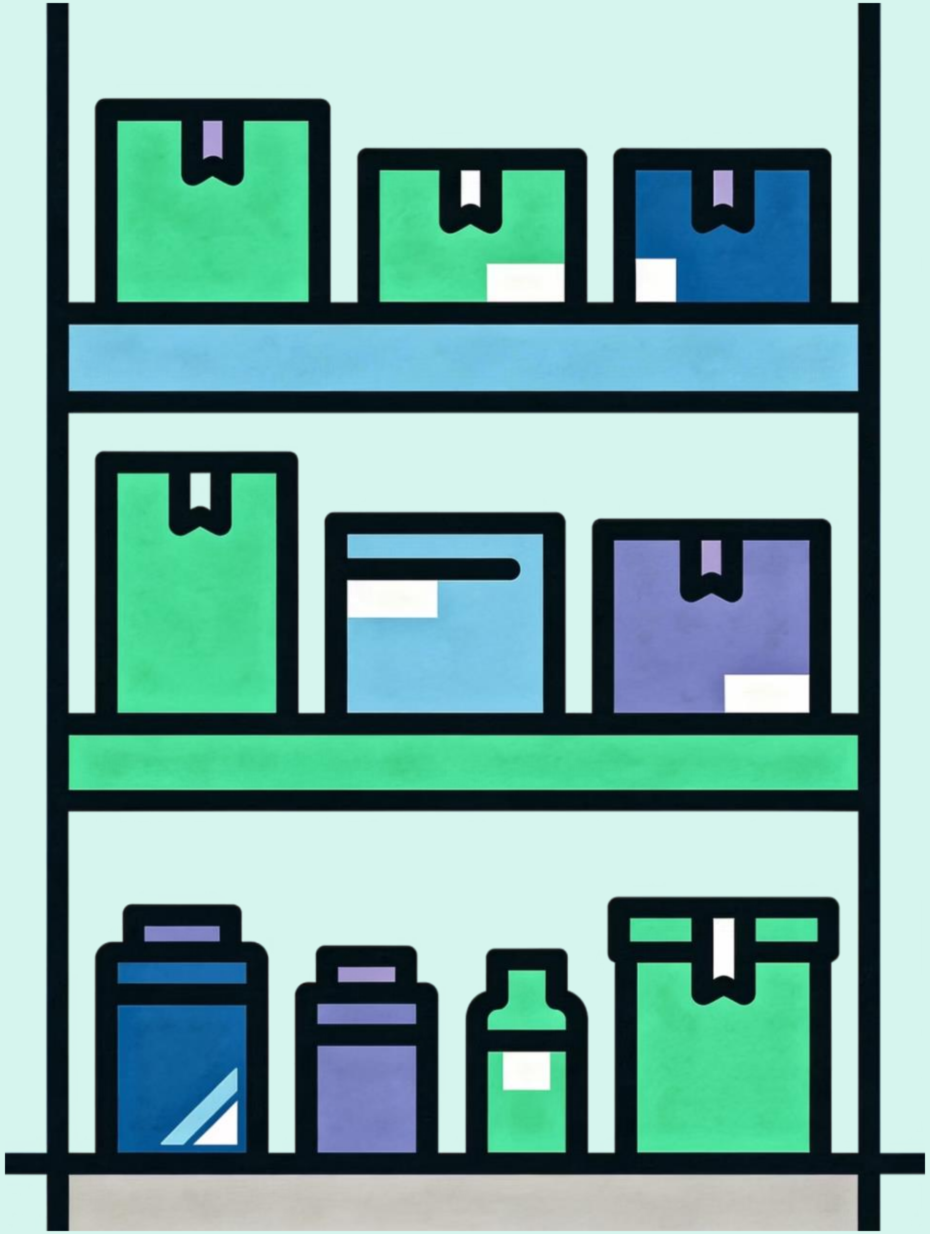
Add activities to change probability or impact; include cost and time buffers.

RISK EXAMPLE

Plan Risk: Example Risk Register

Be proactive — stop problems before they happen!

Risk	Probability	Impact	Owner	Action Plan
Paint doesn't cover well	Medium	High	Bob	Buy a sample and test ahead of time
Paint gets on carpet	High	High	Joe	Use drop cloths; get emergency cleaning supplies
Customer orders more work	Medium	High	Bob	Create a customer satisfaction plan
Run out of paint	Medium	Low	Jane	Identify nearest store; keep truck and card on-site
Painter injured	Low	Low	Joe	Carry liability insurance



Plan Purchasing

Have what you need at the time that you need it. Purchasing planning prevents costly delays during execution.

Determine Needs

Identify all goods and services required for your project — tools, materials, and contracted services.

Plan Acquisition

Decide where and how to obtain each item — buy, rent, or contract.

Time It Right

Ensure materials arrive when activities are scheduled — not too early, not too late.

Plan Risk & Purchasing: Your Turn

Plan Risk

For your project, identify risks and complete a risk register with:

- Risk description
- Probability and impact
- Owner and action plan

Plan Purchasing

Determine what goods and services you need and how to acquire them.

What you need: Ladder, brushes, rollers, paint
How to acquire: Rent ladder; buy supplies at Lowes; buy paint at Sherwin Williams

PLAN PHASE

Plan People: Build Your Team

Key Steps

- Acquire your project team
- Assign team members to roles and activities
- Train your project team
- Determine how to motivate and reward your team

Your project needs a **trained, organized, motivated** team to succeed.

Organizational Tools

Organization Chart: Shows reporting structure — for example, Joe manages Bob, Jane, and Betty.

Responsibility Matrix: Maps team members to activities. P = Primary Responsibility, S = Secondary Responsibility.

Plan People: Your Turn

Work through each step to staff, structure, and prepare your project team.

1

Acquire Team

Decide how you will bring team members on board — hire, assign, or contract.

2

Assign Roles

Match team members to project roles based on skills and availability.

3

Assign Activities

Link each team member to specific WBS activities using a responsibility matrix.

4

Train & Motivate

Plan any required training and determine how you will recognize and reward your team.

PLAN PHASE

Plan Communication

Why It Matters

Poor communication causes misunderstandings, wasted effort, and low morale.

> "90% of a project manager's time is spent communicating."

Types of Communication

- Internal / External
- Vertical / Horizontal
- Written / Oral
- Formal / Informal

Key Communication Skills

Skill	Purpose
Active listening	Hear what others are really saying
Questioning	Uncover deeper meaning
Setting expectations	Tell others what to expect
Coaching	Improve performance
Persuading	Convince others to act
Motivating	Encourage the team
Resolving conflict	Minimize disruption

Purchasing & People: Your Turn

Have what you need, when you need it — and the right people in the right roles.

Plan Purchasing

- What goods and services does your project need?
- How will you acquire each item?
- When do materials need to be on-site?

Plan People

- How will you acquire your team?
- How will you assign roles and activities?
- How will you train, motivate, and reward your team?

Plan Phase: Key Takeaways

A strong plan addresses every dimension of your project before work begins.

Scope

Define outputs and create a WBS

Time

Sequence activities and build a schedule

Cost

Estimate labor, supplies, and overhead

Risk

Identify, assess, and plan for threats and opportunities

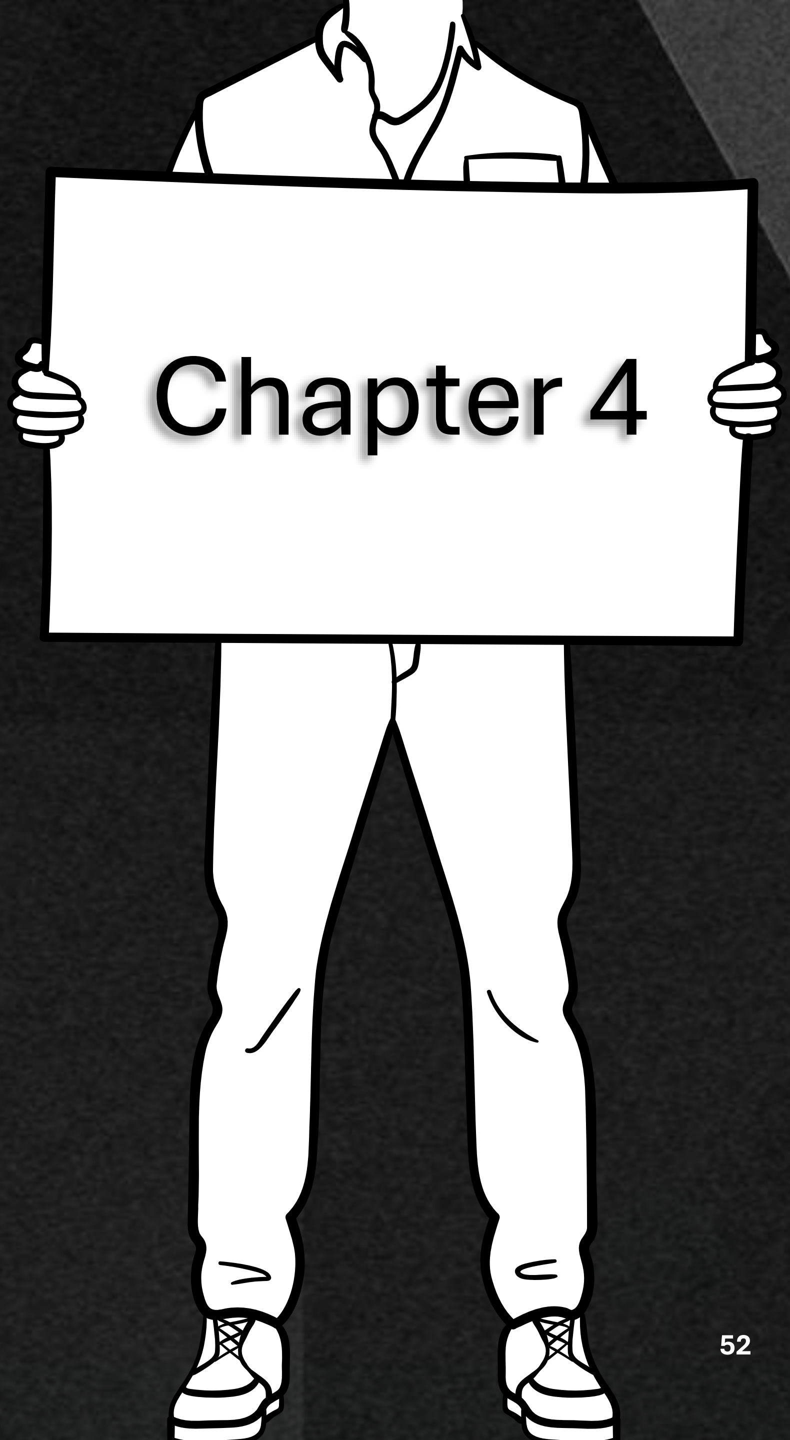
Purchasing

Have what you need, when you need it

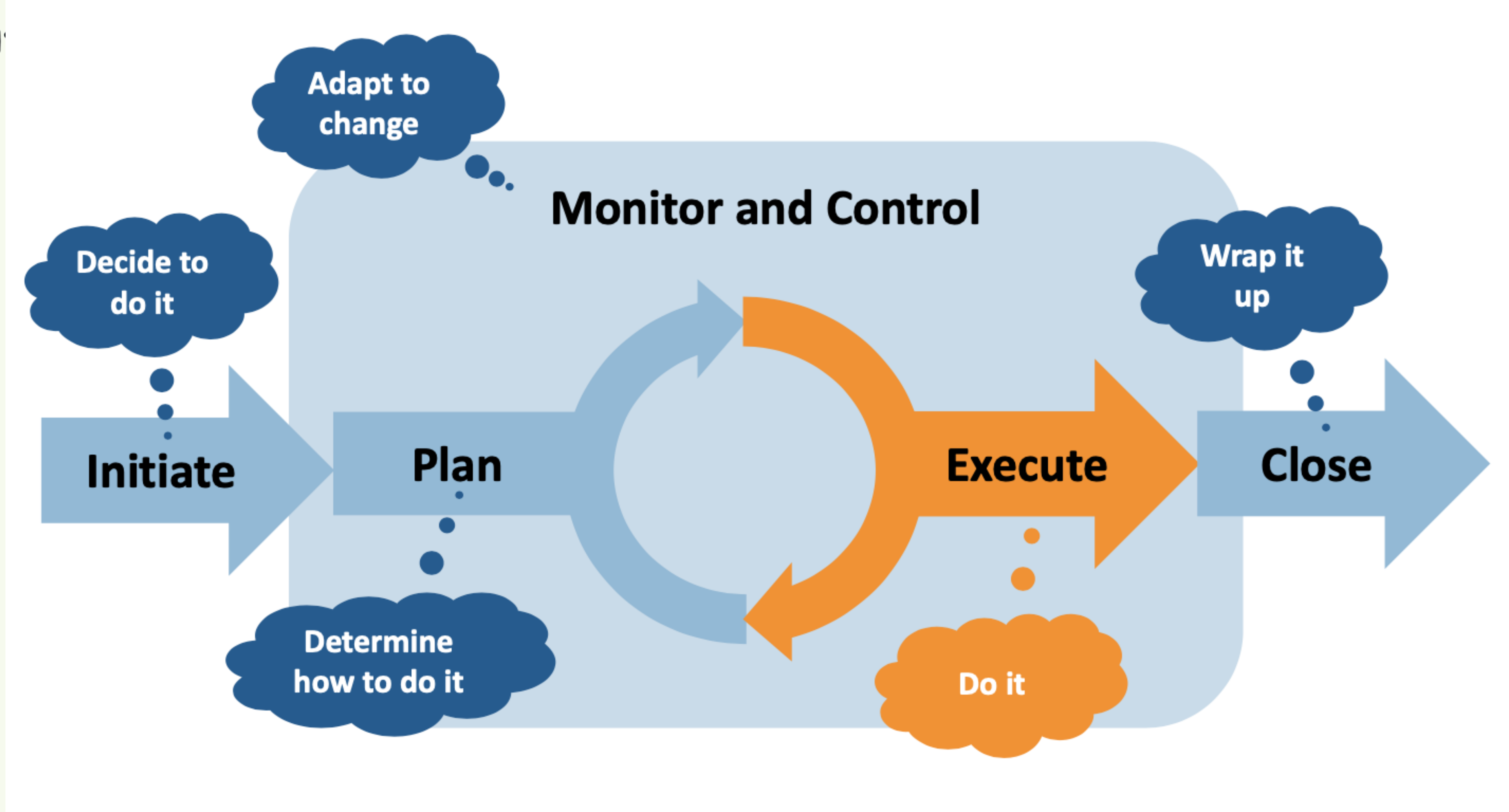
People & Communication

Build a trained, motivated team and communicate effectively

Execution Phase



Execute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Now That You Have a Plan — Follow It

Let’s do the work

Imagin, you work without a plan

A good plan makes executing easier.

Execute= Follow Your Plan & Produce the Output

Perform All Planned Activities

- Prepare
- Apply paint
- Clean up

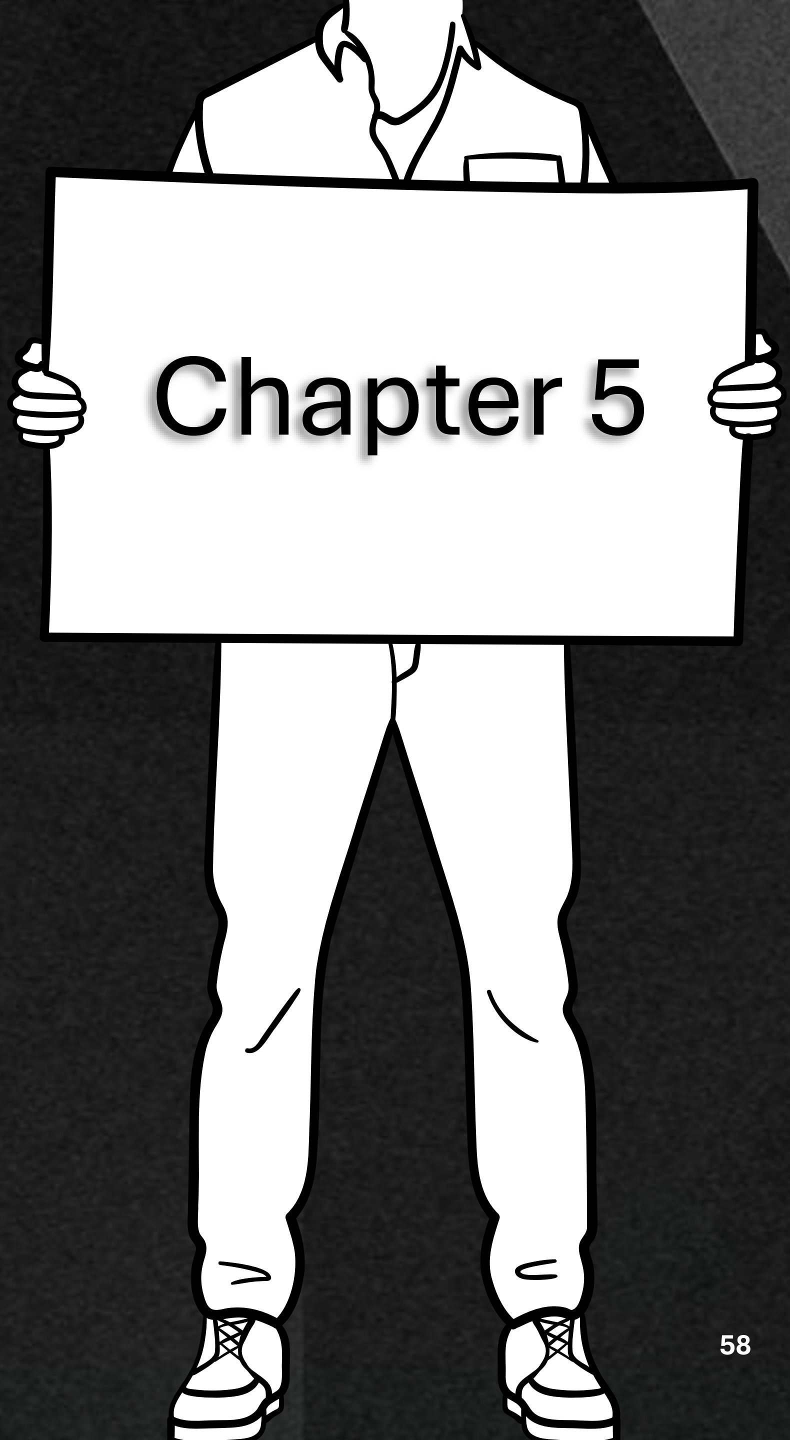
Execute: Project Manager's Role

- Lead the Team
- Carry Out the Plan
- Communicate
- Mitigate risks
- Inspect for quality

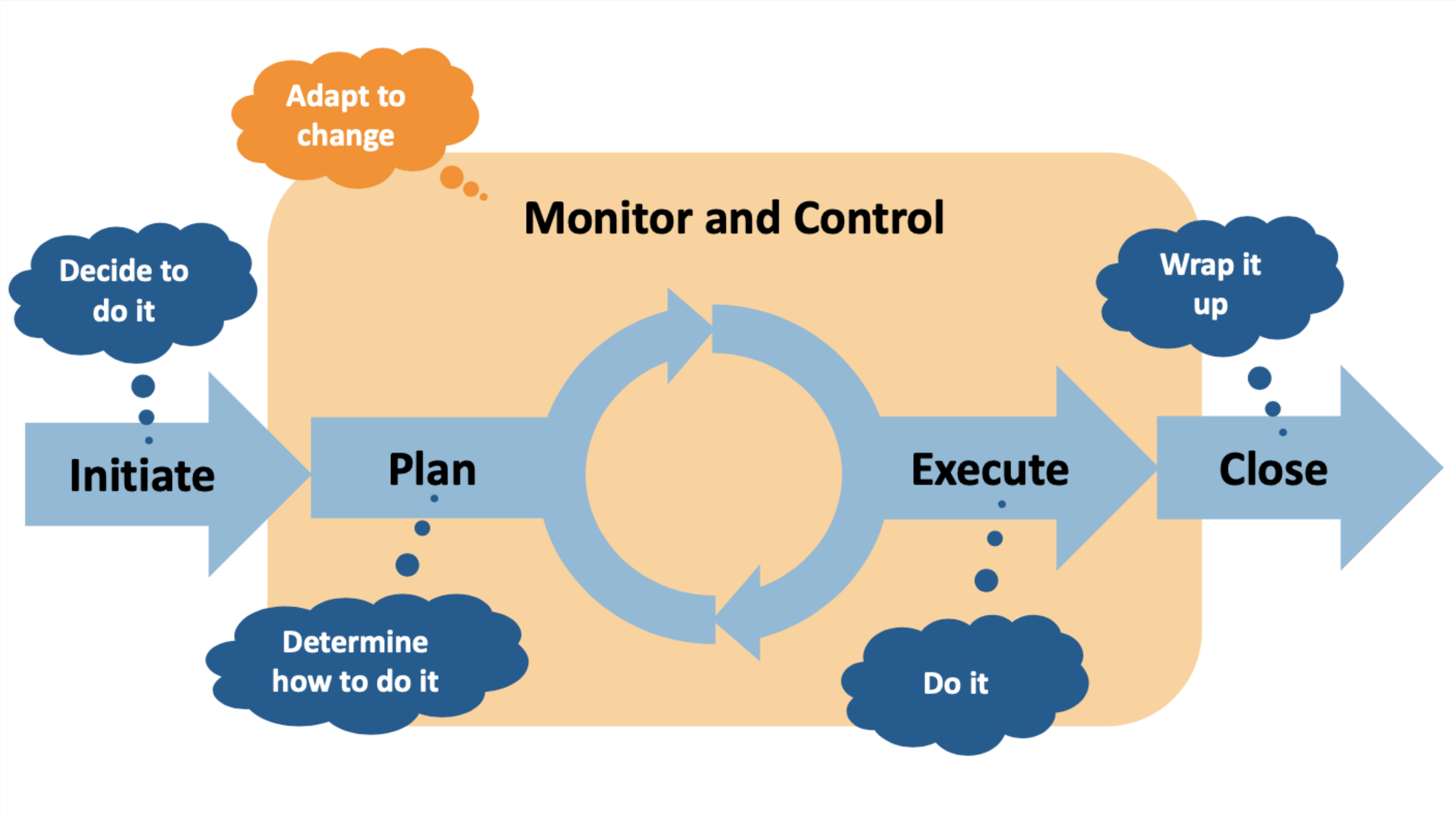
Execute: Other Roles

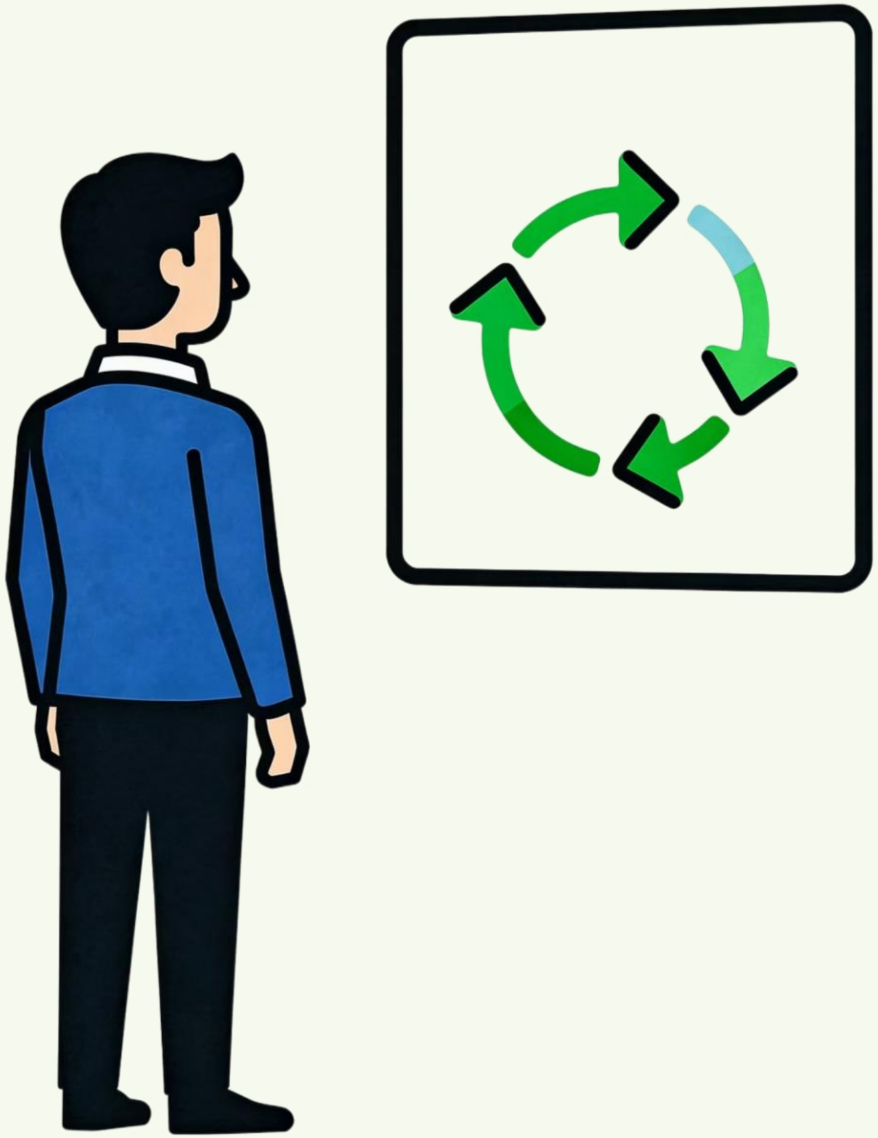
Team	Sponsor	Stakeholders
• Does the work	• Provide fund	keep engaged & satisfied

Monitor and Control & Closing



Monitor and Control

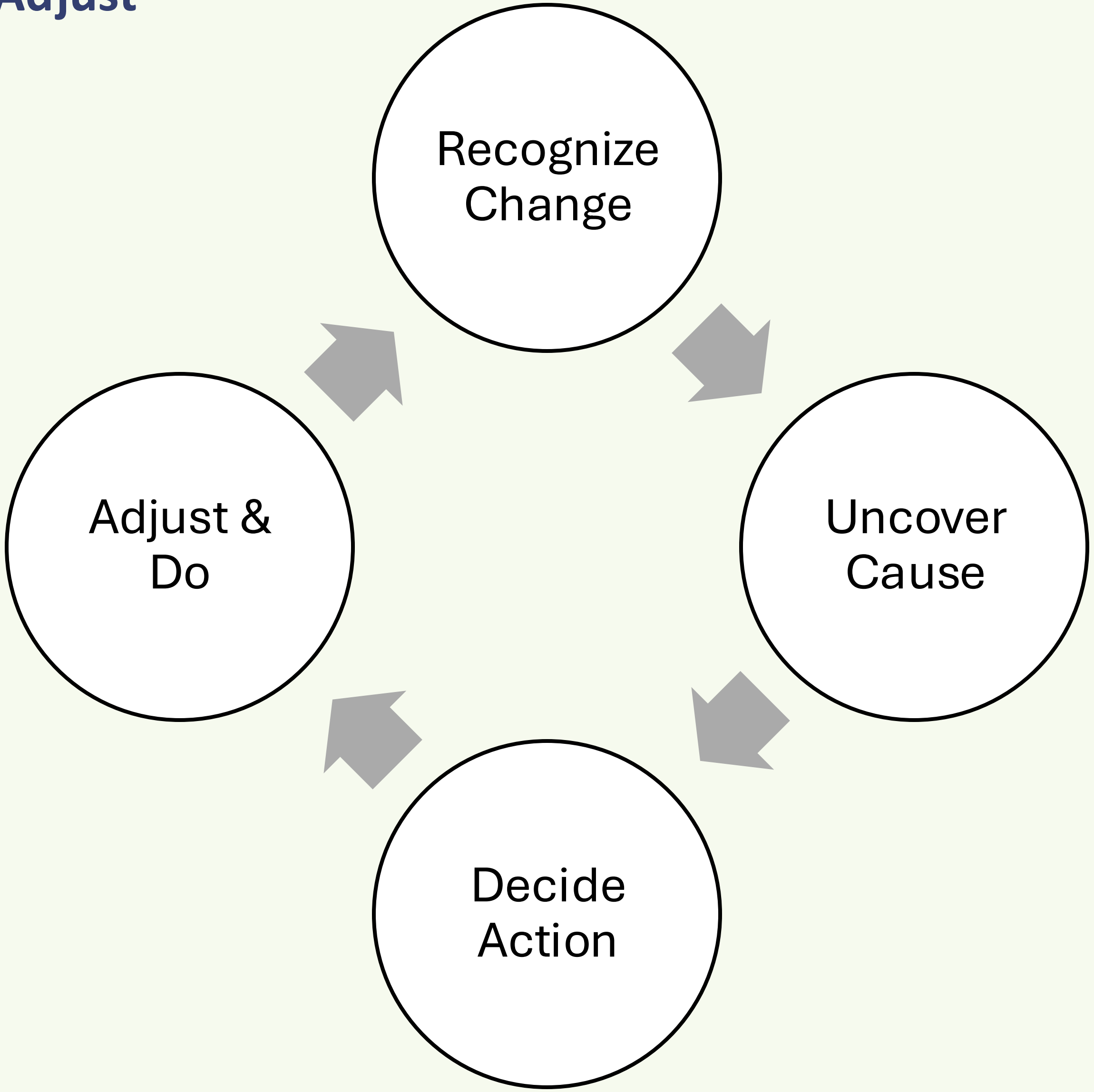




Monitor and Control

Oversees all other process groups — Initiate, Plan, Execute, and Close — ensuring the project stays on track and adapts when things change.

When Things Change … Adjust



Step 1: Recognize Change

Measure Results

Compare cost, schedule, and deliverables to your plan.

Listen to Stakeholders

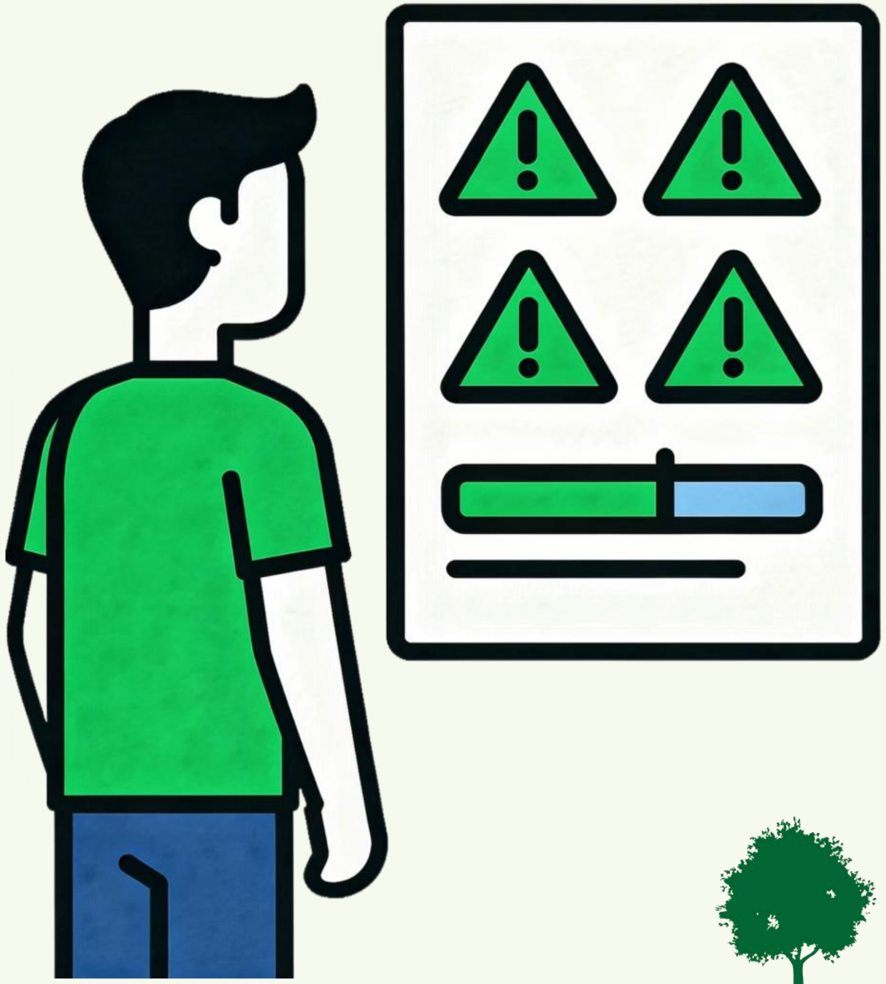
Hear from customers, team members, and others.

Stay focused on your plan while you evaluate the change.

Painting a Room Example

50% of the room is painted, but only 25% of the paint remains

A stakeholder says: *"We're going to run out of paint."*



Recognize Change: Communicate

Measure Results	Listen to Stakeholders	Recognize Change
Product deviates from requirements	I want something else I did unplanned work	Scope
Spending too much money	I need more money	Cost
Work is behind schedule	I need more time	Schedule
Product is defective	I don't like the product	Quality
No response to calls/emails	I didn't know	Communications
Mitigation not working	I'm worried about...	Risk
Supplies not received	I did not receive...	Purchasing
Stakeholders skip meetings	I haven't seen him/her...	Stakeholder Engagement

Step 2: Uncover the Cause

Find Out Why

Talk to those closest to the issue. Ask "why," listen, then ask "why" again. Focus on cause — not blame.

Painting Example

Ask questions to find out *why* you are running out of paint. Get past the symptoms to the root cause.

Step 2: Uncover the Cause

Measure Results	**Listen to Stakeholders**	**Why**
Product deviates from requirements	I want something else I did unplanned work	We need it orange color, you made it yellow>> Why>> because you team did’t read the plan
Spending too much money	I need more money	Customer wants more and more quality than agreed
Work is behind schedule	I need more time	Walls are not clean

Step 3: Decide What to Do

How to Decide

- Focus on the project's mission and priorities
- Consider interaction among constraints
- Weigh pros and cons of each option
- Get input from experts

Step 3: Decide What to Do

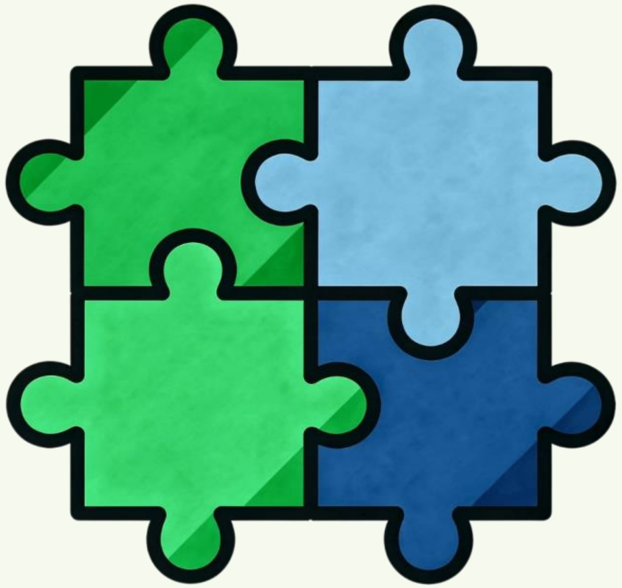
Measure Results	**Listen to Stakeholders**	**Why**	**Action**
Product deviates from requirements	I want something else I did unplanned work	We need it orange color, you made it yellow>> Why>> because you team did't read the plan	Change color to orange
Spending too much money	I need more money	Customer wants more and more quality than agreed	Stick to the plan
Work is behind schedule	I need more time	Walls are not clean	Ask for more time

Making a Decision

- Recommend Action
- Get Agreement
- Accept or Reject

Control the change — don't let it control you.

Step 4: Adjust Your Plan



How to Adjust

- Determine how your decision affects each aspect of your plan
- Adjust the plan to reflect the change
- Involve stakeholders in the process

Your plan covers: **Scope, Time, Quality, Risk, Purchasing,** and **People** — all pieces interlock.

Keep your plan up-to-date with your decisions.

Monitor and Control: Your Turn

Apply the five-step change management process to one of these painting project scenarios:

1. **The Wallpaper Surprise**

   You arrive to find the walls covered in shiny silver wallpaper from 1981. The homeowner is proud of it.

2. **The Perfectionist Helper**

   A helper refuses to use a roller, insisting her tiny artist's brush is more accurate — "worth the extra time."

3. **The Missing Trim Paint**

   You ran out of trim paint around the window — but rationalize that curtains will cover it anyway.

Execute Your Adjusted Plan

Communicate

Tell all stakeholders about your adjusted plan before you begin.

Execute

Follow your adjusted plan with discipline and consistency.

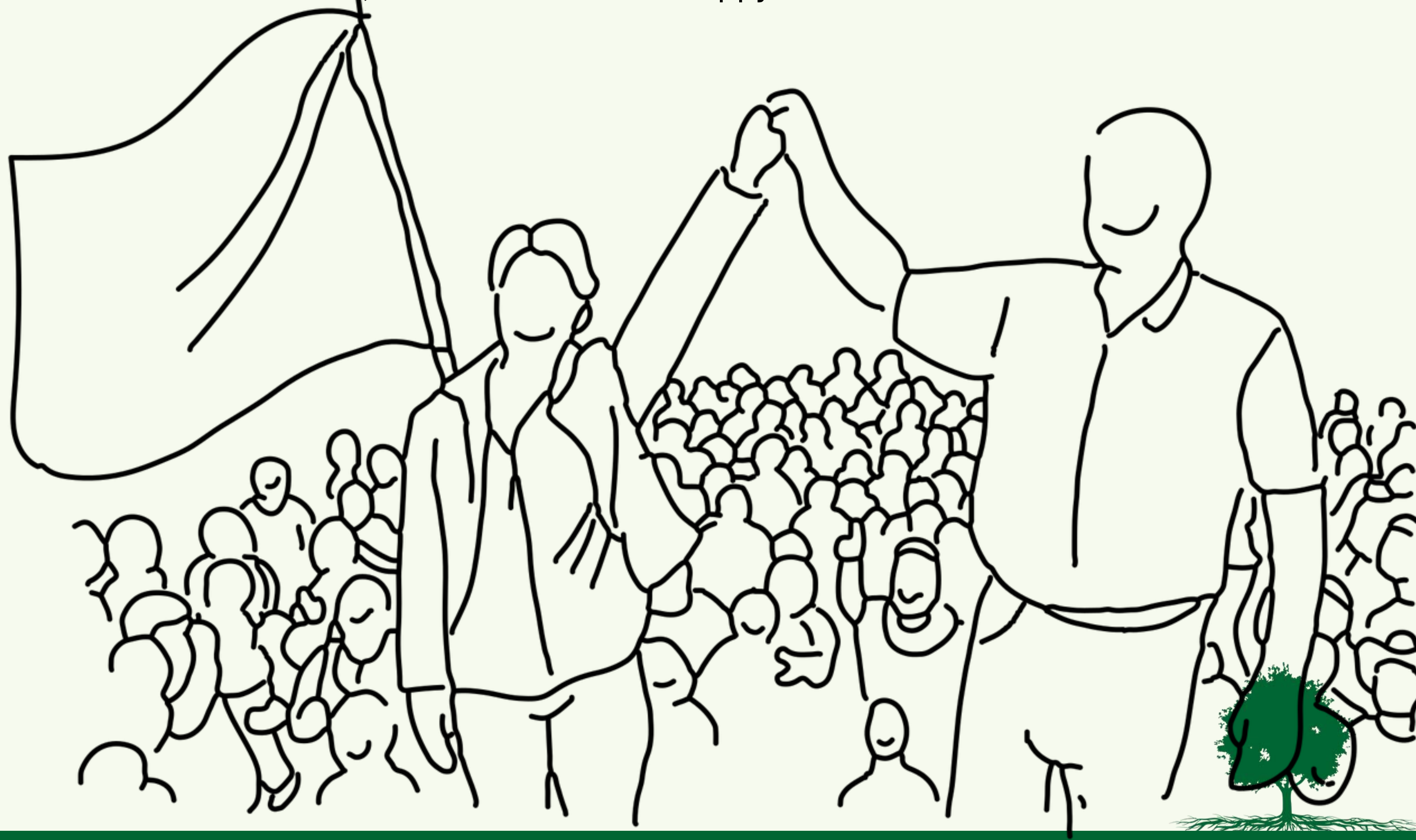
Follow through on your decision.

Closing the Project

Finalize the work as planned.

Get final acceptance from customer.

Make sure the value was delivered, and the customer is happy.



Thank you