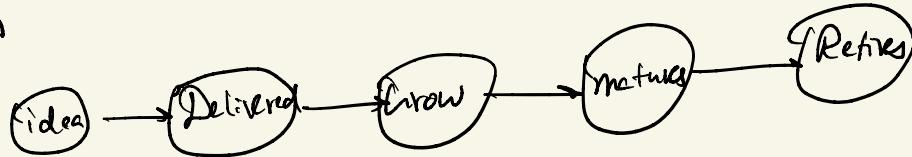



Project Management Life cycles

- Adaptive → PDCL - Plan, Do, check, learn
- Predictive → PDCA - Plan, Do, check, Act

A lifecycle is a series of phases a project passes through



Predictive

- Waterfall → Use when clear goal, low tech
- follows: Initiating, Planning, Executing, Monitoring & controlling, closing.

Adaptive

- Scrum
 - User stories
 - Product Backlog
 - Sprint
- Use when: Unclear goal, changes, high tech, creativity

Project lifecycle allows a systematic approach

⇒ Structure
Communication
Progress tracking
Evolution

Project scope → Schedule baseline → Project management plan → Scope creep

for project success criteria
Reviews

Adaptive Lifecycle

Artifacts = Templates, documents, outputs (or) deliverables

3 common artifacts:

Product Backlog → A list of all project requirements the product owner develops & maintains

Sprint Backlog → A list of specific tasks from the user story that agile team develops.

Product increment → Deliverables from each sprint that the team provides to the customer for feedback

Product backlog:

- Product owner defines documents requirements as user story
- Product owner then adds & prioritized user stories to the backlog.
- Works with the team to determine which user stories the team will include in the single iteration/sprint.
- Minimum Viable product (MVP) is an increment the team produces in a single sprint.

Sprint backlog \Rightarrow equivalent to W.B.s.

- Team selects a set number of user stories for implementation in each sprint.
- Sprint backlog breaks each user story into tasks the team must accomplish.
- The project owner lists tasks in the order in which they occur and assigns them to individual team members.

→ Team uses sprint backlog to stay on track and reduce potential for scope creep.

Product increments

- Deliverables
- Increment
- Multiple sprints

User story

- User story requirement contains 3 statements
 1. Role
 2. Need
 3. Value
- Acceptance Criteria (determining solutions to satisfy user story)

Product owner shares solutions with customer, gives sign off after validation
includes the user story in the backlog.

→ Each user story requirement & solution definition must be specific, measurable to a point where team can determine the time & cost required.

Product follows DEEP model

DEEP

backlog

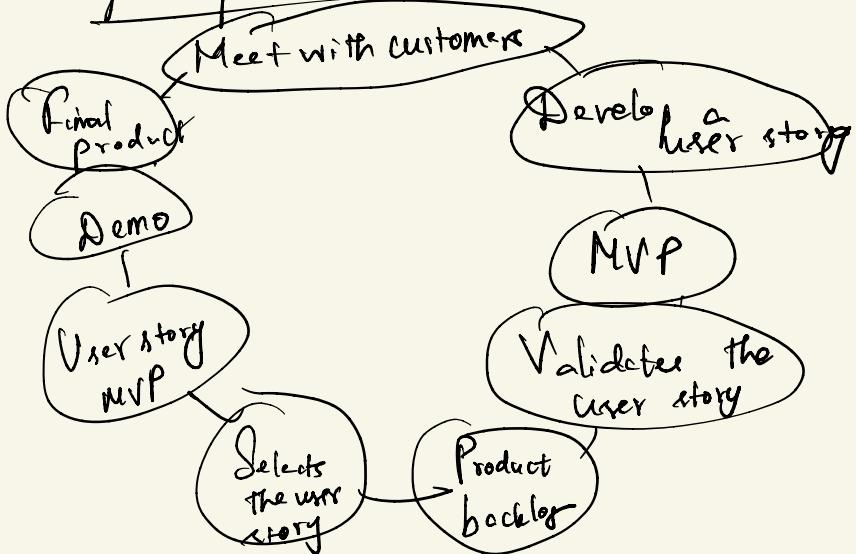
Detail - The details must be accurate and detailed to find soln

Estimate - Req & soln must evaluate time & cost

Emerge - The product backlog will change after each sprint based on customer feedback.

Prioritize - Product owner should prioritize user stories on value and logical order of product completion.

Agile product mgmt process - 9 steps

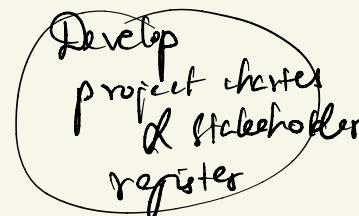
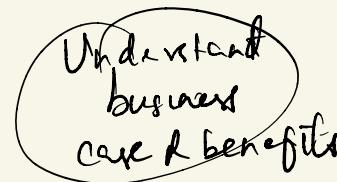


Project process groups

Initiation:

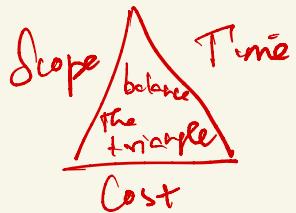
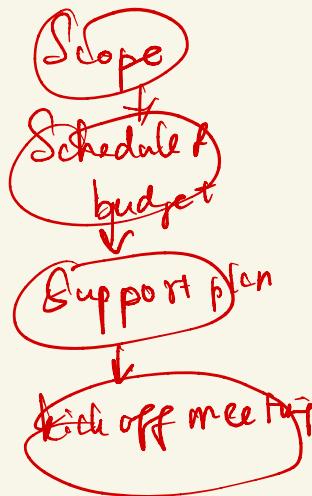
- Business case
- Project charter → What is the project?
- Project brief → Why does the project matter?
- Stakeholder register → How will it be implemented?
- Stakeholder engagement plan

Who is critical to project success



Planning: PMI has 49 steps recommended to plan & deliver the project

- ↓
→ 24 / 49 fall in planning phase → Critical
PM } → Guides & Controls the end-end planning process
} → Enlists the support of the project team
} → Responsible for project results



Having a project management plan approved is Baseline approval *

Project Executing

→ Planning tasks completed & project management plan approved

9 processes

1. Resources - If resources are not acquired the project schedule may change.
2. SOW - If contracts are not finalized, the schedule may change.
3. Communication - Requirement will change through the process
4. QA - Focuses on preventing issues & defects.
5. Status Reporting & lessons learned.

b. Team development

T-Team Management

8. Risk Management

9. Stakeholder management

Roles & responsibilities

1. Accessible

2. Communication

3. Change management system

4. Lessons learned

5. Support

II Interpersonal skills

1. Communication
 2. Leadership
 3. Motivation
 4. Conflict Management
 5. Negotiation
 6. Coaching
 7. Political/cultural awareness
 8. Influencing
 9. Decision-making
10. Team building
 11. Trust-building

Monitoring & Controlling phase

- Deliverables meet project management plan specification
- Integrated change control. → 3 components: Unique process, change log, change form.

9 processes

1. Quality - Inspects, verifies, correct.
2. Scope Validation - Customer is always right
3. Baseline Control - Project Management plan
4. Resource Control - Change, resource needs
5. Communication
6. Risk
7. Procurement
8. Stakeholder Engagement

Roles & responsibilities

- Be accessible
- Effective meetings
- Integrated management system
- Lessons learned
- Defective deliverables check

Interpersonal skills same as executing phase

Closing phase

- Project team produces a deliverable, quality control team inspects the deliverable and project manager verifies the deliverables as meeting specifications from project management plan.

Key outputs

- Evaluate against project charter
- Evaluate against business case / business mgmt plan
- fulfillment of all contract deliverables & settlement of final payments
- Authorized agent accepts the deliverables (like customer, user, sponsor)

→ Final product transition

↓
Crucial product (or) service handoff.

→ Final report is an overview of what the project team plans to create (vs) what they produce

→ If there are gaps (or) omissions, project manager must address them.

→ Lessons learned are critical to help future projects succeed.

key roles & responsibilities

- Staying in constant contact with those who accept the final product or service.
- Search for any deviations that may result in non-conformance and a lack of fitness for use.
- Ensuring the capability of suites
- Communicating to all stakeholders to signoff.
- Performing variance analysis
- Cost analysis
- Conducting lessons learned.

Project Management Lifecycle Failure Causes

1. Scope creep
2. Poor communication
3. Poor resource management
4. Inadequate stakeholder management
5. Poor estimation
6. Poor risk management
7. Poor planning
8. Poor quality management
9. Project manager role
10. Incorrect Project lifecycle selection