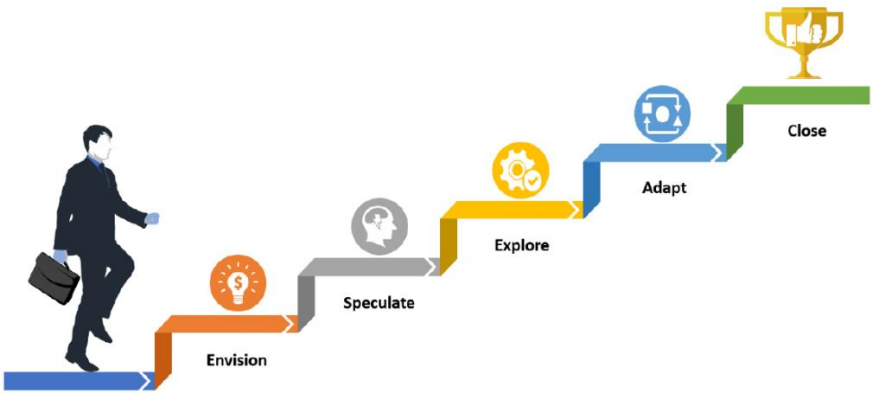
How to deliver Projects successfully in Agile?

Agile Project Management Process Framework

Overview

- An Agile process framework needs to embody the principles such as self-discipline, steering but not Command and Control, team accountability, and participatory decision-making.
- An Agile process framework must also support business objectives.
- In addition to supporting business objectives, the framework needs to:
  - Support an envision, explore, and adapt culture
  - Support self-organizing teams
  - Promote reliability and consistency to the extent possible, given the level of project uncertainty
  - Be flexible, easy to inspect and adapt
  - Support visibility into the process
  - Incorporate learning
  - Incorporate practices that support each phase
  - Provide management checkpoints for review

Framework



- A quick overview of each phase:
  - **Envision:** Determine the product vision and project scope, organize the team, and self-organize about how they will work together.
  - **Speculate:** Plan feature-based release (or milestone) and arrive at iteration plans to make the vision a reality.
  - **Explore:** Build and deliver tested features iteratively in a short timeframe.
  - **Adapt:** Reflect the product/project/team's performance and adapt as necessary.
  - **Close:** Close the project, share key learnings, and celebrate.

Let us learn about each of these phases in detail.

Envision Phase

Product Vision

- The Product Owner will visualize the product, a snapshot of the product in future, with the help of other stakeholders.
- Product Vision is a short and sweet statement that describes the future state of the product.
- To arrive at Product Vision, the Product Owner may carry out a few activities such as Product Vision Box. (Refer to Product Management additional reading material to know more about Vision Box)
- Project Architecture can also be arrived at while visualizing the product.

Project Scope

- On Agile projects, requirements are in the form of backlog items.
- The Product Backlog contains all the project requirements.
- The Project Owner owns the Product Backlog and prioritizes it.
- Teams can create a project datasheet to summarize the project.

Project Team

- A Project Team aims to get the right people in the project.
- Team members with the required skill sets and expertise are assembled based on the Product Backlog and architecture arrived at.
- These team members should self-organize about the roles in the project.

Project Approach

- The project's processes and technical approaches are tailored to suit the project requirements.
- Customers may insist on use cases to be used for requirements. Team members should create User Stories from these use cases.
- Effective technical practices such as pair programming and refactoring, which are applicable to the project and agreed upon, are identified.

Speculate Phase

- Speculate phase is where planning for the project is carried out.

Feature Breakdown

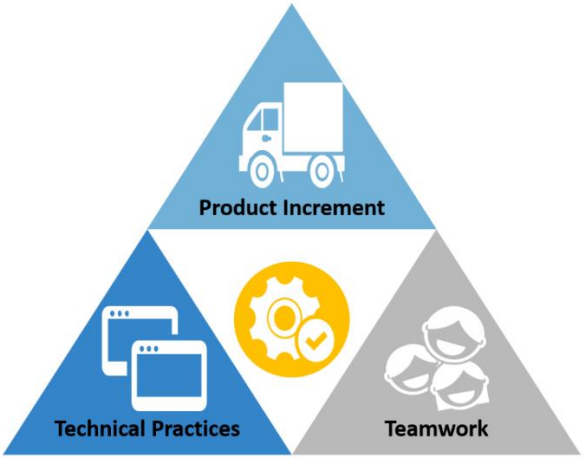
- At the initial stages of the project, the Product Backlog may contain high-level items with minor details.
- These high-level items are called Epics (they are also popularly known as Modules in traditional projects).
- These Epics are broken down further into Features, which contain a set of functionalities that can be delivered together.
- Features are further broken down into User Stories that contain more details. These User Stories are short requirements spoken from the perspective of the role.
- Please refer to DEEP Product Backlog in Product Management additional reading material.

Release Planning

- Release plan presents how the team intends to achieve the Product Vision over a period of time.
- A release contains multiple iterations. Each iteration delivers a Product Increment.
- At the end of a release, the constituent iterations of the release deliver fully tested integrated features that are ready for deployment.
- Customer's Business Value and Risk are influencing factors for Release Planning.
    - Business Value: Teams strive to deliver as much Business Value as possible over the release. To achieve this, teams select User Stories with high Business Value for each iteration.
    - Risk: Product Backlog items are prioritized based on the risk. High-risk items are placed on top of the Product Backlog. Teams pick these high-risk items during Sprint planning and try to deliver them as soon as possible.
- Please refer to this link for a detailed description of Release Planning and the activities to be undertaken:

  https://techdocs.broadcom.com/us/en/ca-enterprise-software/agile-development-and-management/rally-platform-ca-agile-central/rally/using-top/timeboxes/timebox-based-planning/release-planning.html

Explore Phase



- In this phase, the team uses an iterative approach for development; that is, Build.

Product Increment

- In each iteration, the team starts with Sprint planning.
- During Sprint planning, the Product Owner presents ordered Product Backlog items.
- The team picks the topmost item that is ready for development and estimates it.
- The team repeats this for the next high-priority items until their capacity is filled in. For more detailed Sprint planning exercise, please check the next section.
- During the iteration, the team works on committed User Stories to deliver per agreed Definition of Done.
- At the end of each iteration, the team delivers a fully tested and working Product Increment.

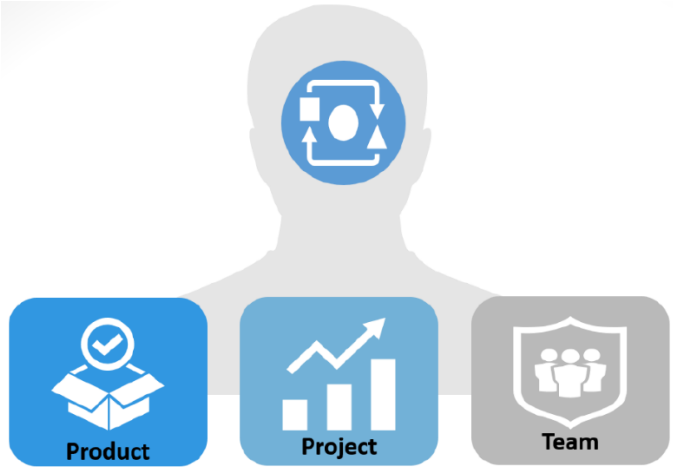
Teamwork

- During iteration, all team members are accountable for its success or failure.
- The Scrum Master focuses on removing the impediments that are bothering the team members.
- Every 24 hours, the team members meet at Daily Scrum to present each team member's work with three questions— "What did I do yesterday?" "What I am going to do today?" and "Are there any impediments that might prevent me from working?"
- The Product Owner must be present during the iterations so that he or she can clarify any queries team members may have while working on a selected User Story.
- User Stories that are completed per Definition of Done are presented to the Product Owner for review.
- Each team member should look for areas of improvement in team members, processes, and technical practices during Sprint Retrospective.

Technical Practices

- Team members work on technical practices such as Pair Programming, Refactoring, and Continuous Integration.
- Architecture and Design evolve during iteration. Teams tend to keep the architecture as simple as possible to meet the User Stories they are working on.
- Team members initially may need some training or coaching to get familiar with the technical practices.
- **Technical practices** are presented in detail in Scrum Adoption.

Adapt Phase



Product

- Throughout the iteration, as soon as a User Story is completed, it is presented to the Product Owner to test. This will help the Product Owner to assess the product development.
- Sprint review provides an opportunity for the Product Owner and other stakeholders to assess the completed User Stories against agreed Definition of Done.
- **Backlog Grooming** is a continuous activity carried out by the Product Owner throughout the project. The Product Owner works on new items discovered, reprioritizes existing backlog items to meet current business scenarios and demands, makes backlog items ready for upcoming iterations, etc.

Project

- Project's progress is assessed, and necessary adaptations are arrived at.
- Teams constantly update Information radiators such as Burndown charts, Cumulative Release Burndown charts, etc.
- These tools will help the Product Owner and other stakeholders to review project progress.

Team

- During Sprint Retrospect, the team members reflect on how the completed Sprint progressed and look for areas of improvement.
- Teams work toward achieving those improvements in the upcoming iterations.

Close Phase

Close the Project

- During project closure, resources will be released.
- The completed product will be transitioned to business as usual or operations environments.
- Some organizations might undertake a complete review of the project against the contract.

Share the Lessons Learned

- Agile teams may present the lessons learned during the project for the benefit of the organization and other teams.