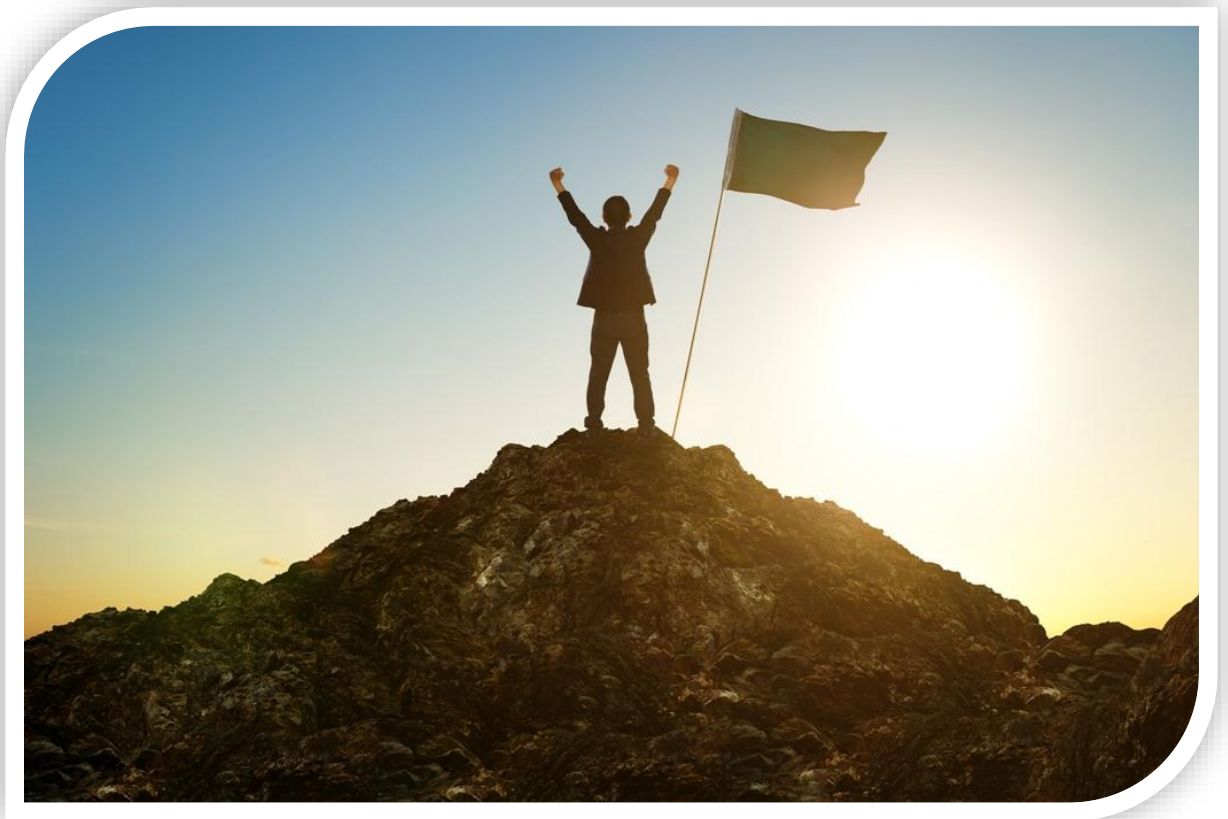




Successful Scrum Adoption



Guidance for Individuals – Traditional Old Roles in Scrum

Projects

- Apart from the roles of Scrum Master, Product Owner, and team members, there are no other roles on Scrum.
- Let us see how traditional roles such as Business Analysts, Project Managers, Architects, Functional Managers, etc. fit into Scrum.

Analysts

- Analysts are backed by their knowledge on the product to be developed and communication skills and might shift into Product Owner roles.
- On a large project, the Product Manager may become Chief Product Owner and analysts may serve as Product Owners for their teams.
- Most teams find analysts quite useful and work with them on requirements, clarifications, test scenarios, etc.
- On a Scrum Project, analysts should stay just ahead of the team (for example, not only must analysts know details about current features but they must also focus on near future features that might come up in the next 2 to 3 Sprints) and provide useful information to team members.
- Analysts help the team members to talk about requirements instead of going through documentation that has already been prepared.
- On traditional projects, team members reach out to business users via analysts. In Scrum, team members can have direct access to Product Owner, and an analyst can act as a facilitator for these interactions.

Project Managers

- On a traditional project, the Project Manager manages almost everything in the project—scope, time, cost, quality, risk, communication, stakeholder engagement, etc.
- On Scrum projects, we do not have a Project Manager role. Please note that this doesn't mean the responsibilities of a Project Manager are eliminated—they are not.
- A lot of responsibilities of the Project Manager are now shared by the team members in a Scrum project because of self-organization.
- In an organization, you may typically find technical Project Managers (who have worked earlier in technical roles such as Programmer and Tech Lead) and functional Project Managers (who have worked earlier in managing the requirements and providing subject matter knowledge). These Project Managers can become Scrum Masters.



- Project Managers **must overcome their old habits** such as directing the team, assigning tasks to team members, and making decisions on behalf of the team.
- The following are a few strategies new Scrum Masters (coming from strong Project Management background) can adopt if they must also coach team members:
 - **Stick as close as possible to doing Scrum by book:** These new Scrum Masters can follow the Scrum guide or any other relevant book initially. They may also engage an onsite trainer for advice.
 - **Talk to other Scrum Masters as much as possible:** If there are multiple Scrum Masters already functioning in the organization, these new Scrum Masters can talk to them to get their good and bad experiences. If other Scrum Masters don't exist in the current organization, these new Scrum Masters must look outside the organization for advice.
 - **Learn as much as they can and as quickly as they can:** New Scrum Masters should read books, journals, articles, blogs, etc. They can also attend Agile or Scrum conferences.

Architects

- In traditional projects, architects might have been habituated to upfront design and architecture. In Scrum, architecture evolves during the project. This is one of the challenges an architect faces after moving to a Scrum Project.
- On Scrum Projects, architects must work closely with Product Owners to educate the Product Owner about architectural issues with respect to Product backlog items.
- If there are **non-coding architects**, they might have to shift from non-coding into coding roles, that is, hands-on roles. This will benefit the team due to their depth of technical knowledge.
- If such non-coding architects refuse the shift toward hands-on work, they should be moved out of the team as this might impact the entire team.

Functional Managers

- In an organization, you might find roles such as Development Manager, QA Director, etc. working in a matrix hierarchy. They will continue doing so in Scrum.
- They will continue to assign resources to projects in Scrum as they were doing earlier for traditional projects.

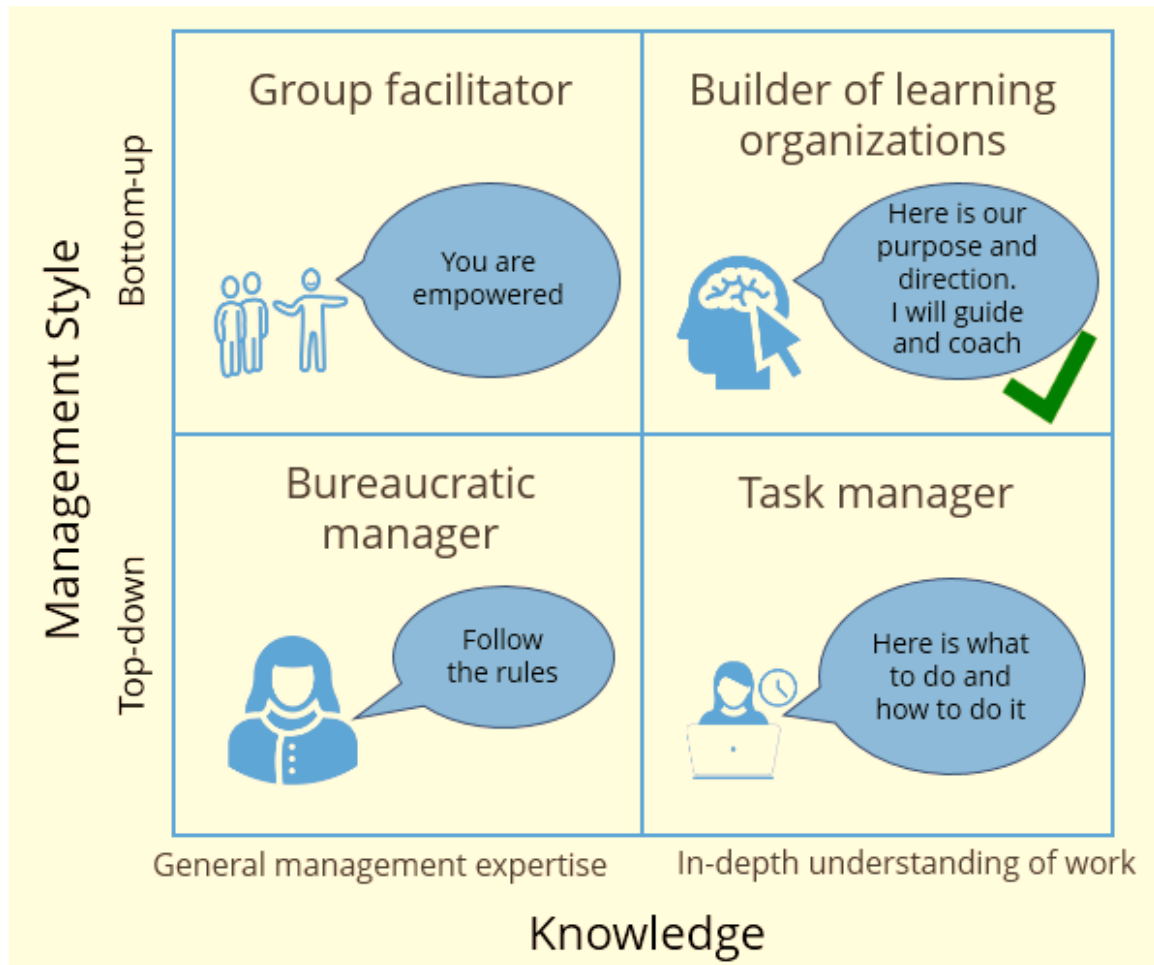


- They will also need to hear from Project team members, location and facilities managers, human resource department, etc. and continue making decisions about career development of project team members.
- If they were assigning tasks to individuals, they should not continue doing that on Scrum projects.

Functional Managers in Leadership Role

- Diverse types of functional managers are determined by type of expertise and management style—"The Toyota way" by Jeffrey Liker © Tata McGraw Hill
- Functional Managers most likely have always been leaders.
- During the management era, most managers used their prior experience to manage everything. These types of managers are Bureaucratic Managers. They are represented in the lower left quadrant in the image below.
- Managers with general management skills and bottom-up approach are Group Facilitators and occupy the top left quadrant.
- Managers with deep understanding of the work and top-down approach are Task Managers and occupy the bottom right quadrant.
- In Scrum, we need functional managers with a combination of deep understanding of work and a bottom-up style of working. These managers are known as builders of learning organizations. They occupy the top right quadrant emphasized by the green tick mark.





- A functional manager is responsible for providing guidance and coaching to team members.
- Functional managers also retain the responsibility of career and personality development of their team members.

Personnel responsibilities such as appraisals and reviews

- Functional Managers may continue doing performance appraisals and periodic reviews of the individuals reporting to them.
- In Scrum, they might have to take feedback about an individual from other team members and Scrum Master.

Programmers

- In traditional projects, programmers might have been habituated only to code as there would be others to test, deploy, etc.
- In Scrum Projects, programmers are expected to analyze, design, write code, and test by themselves.
- The majority of programmers in a Scrum team must be willing to contribute in any number of ways to improve team productivity.

- In Scrum, no one tells programmers what to work on. This is major shift from traditional processes. So, programmers must be proactive and take initiatives on development work.
- Programmers should also interact directly with Product Owners and business users as necessary. They should hold face-to-face or telephonic conversations instead of relying on an analyst to communicate with the Product Owner.
- Programmers also may have to work in open environments rather than cubicle workspaces. They are expected to interact more with their coworkers in a Scrum project.

Database Administrators

- In traditional projects, Database Administrators do a complete analysis of the system's requirements, create logical and physical data design models, and then create the required schema on a physical database. They also write a few procedures and functions.
- This approach doesn't work with Scrum. Database Administrators must keep in mind that database design should also evolve as the project progresses to match the user needs.
- Much of the day-to-day work of a Database Administrator will not change.

Testers

- Traditionally, testers relied on huge piles of requirement documentation and then built exhaustive test cases, scenarios, and plans to work with.
- The primary focus of testing used to be conformance to requirements rather than conformance to user needs. In Agile and Scrum, the focus is on conformance to user needs.
- In Scrum, testers can find out what is expected out of Backlog items by having a series of conversations with Product Owners.
- Testers can also talk to other users and developers, as required.
- One of the challenges that testers may face is working iteratively. They need to consider each sprint a mini project and do the required testing.
- Automated testing is preferred in Scrum and may make the work easier for testers. A few of them (those who were doing manual testing) may lose their jobs too.

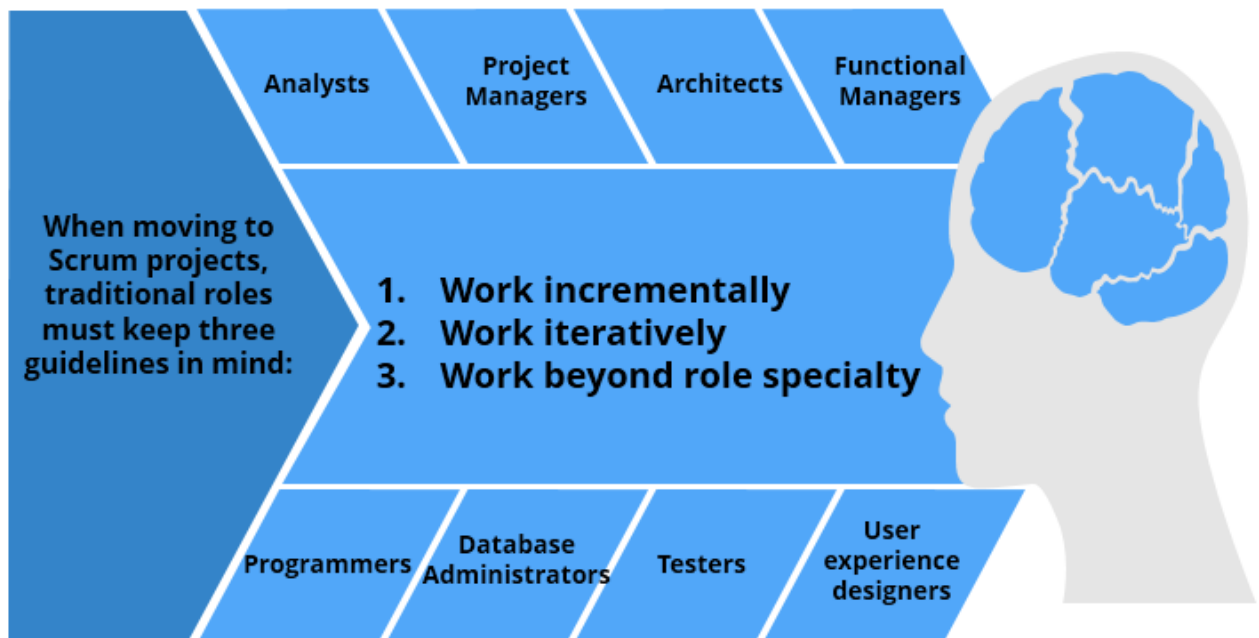
User Experience Designers

- Traditionally, user experience would be designed upfront using mockups, wireframes, etc.



- User Experience Designers may like the idea of iterative development but may want their work to run before the rest of the project.
- It is recommended that you run two parallel tracks—one for development and another for user interaction design. These two tracks must interact with each other with code and design shared across the two tracks supported by tight and frequent communication.
- The User Experience Designers must view themselves as part of the team, and not as a separate unit.
- As part of the team, the User Experience Designers must deliver whatever work is committed by them. They should also be able to work with Product Owner on product design and user experience design.

Summary



The Product Owner and the Team

Long-term partnership between Scrum Teams and the Product they are working on

- A dedicated team should work toward the development of a product
- Changes in team composition makes it necessary to start team building all over again, impacting the productivity and self-organization
- Resource allocation and utilization become simpler with dedicated teams

Colocation

- The Product Owner and the Scrum Team must work very closely and collaborate on almost a daily basis.
- It is desirable to make the Product Owner and the Scrum Team colocated.
- In situations where colocation is not possible, Product Owners can leverage technologically advanced communication tools such as Video conference calls.



Product Owners should spend at least one hour per day with the team for better collaboration, guidance, and advise.

Team Room

- Agile teams thrive and take pride in public display of Information radiators such as product vision statement, product backlog items, software architecture, velocity and release burndown charts, etc.
- It is highly desirable to have dedicated team rooms where the teams can operate with least disturbances.
- This helps the team members to reach out to other team members in face-to-face conversations and thus not waste time on emails, online chat, conference calls, etc.

COLLABORATING WITH SCRUM MASTER

- Every Scrum Team must have a Scrum Master.
- A Scrum Master primarily:
 - Supports the Product Owner and the team
 - Protects the team from external influences and disturbances
 - Ensures that the team:
 - Does sustainable work
 - Stays healthy and provides required nourishment to achieve this
 - Doesn't incur technical debt
- The Product Owner and Scrum Master complement each other as shown below:



Product Owner focuses on **WHAT** is required to make the right product.



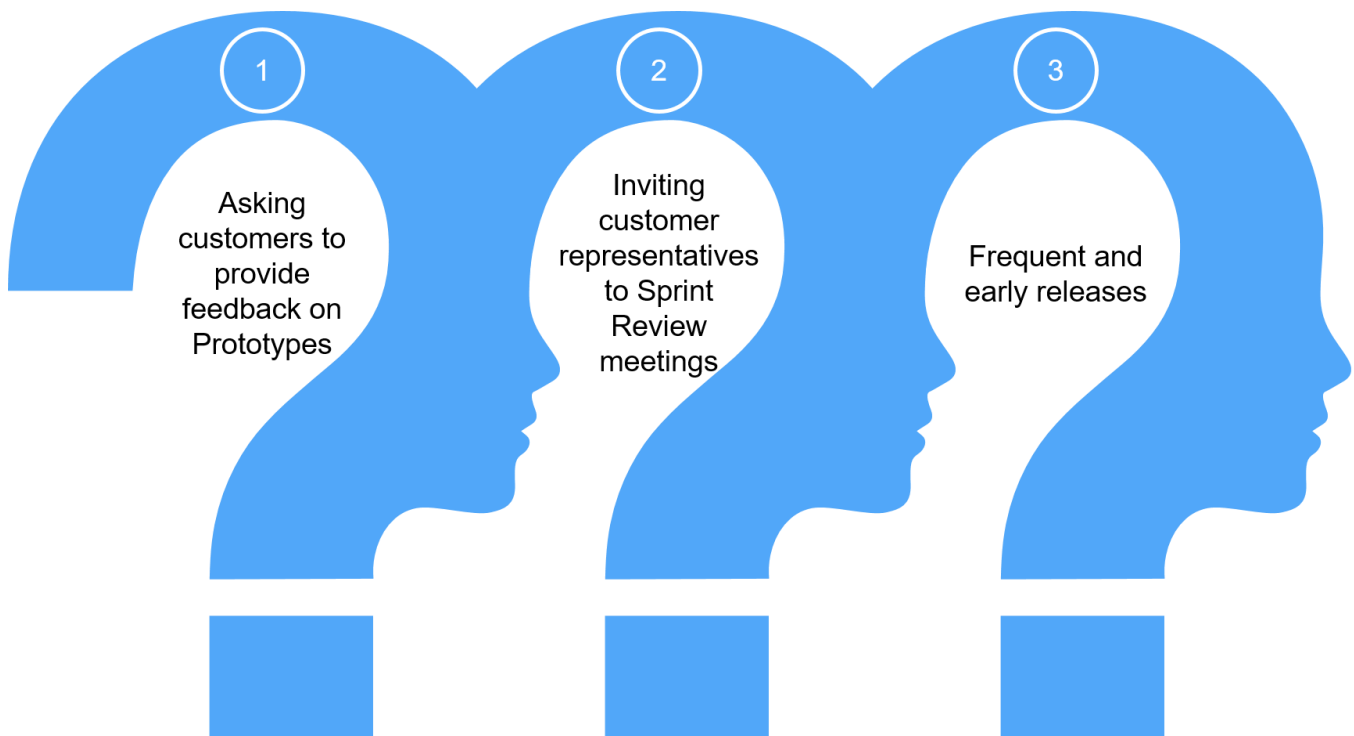
Scrum Master focuses on **HOW** Scrum can be used in the right way.



The same individual should never perform the roles of both the Scrum Master and Product Owner.

COLLABORATING WITH OTHER USERS AND STAKEHOLDERS

- The Product Owner, Scrum Master, and the Development team must develop more detailed and deep understanding of what the customers and/or users want in the product.
- The best way to gain this detailed and deeper understanding is to **involve customers and users early and continuously in the Product Development.**
- The following are a few techniques for involving and learning from customers throughout the Product Development:



SCRUM TEAM COLLABORATION

- In this section, let us explore how Product Owner can collaborate with Scrum Team.

Sprint Planning

- Product Owner has a prime responsibility of backlog grooming—User Stories are prioritized, and high priority items have the required depth of details—before the Sprint Planning meeting.
- Product Owner **must** attend Sprint Planning meeting to clarify requirements and provide answers on User Stories.
- Product Owner helps the team understand **what** must be done in an upcoming Sprint. The team figures out **how much** they can do and **how to do** what they agree with Product Owner.
- Product Owner **can't** instruct the team on technical tasks and also on how much work they can do.
- Product Owner must also understand that the team's commitment, or planned Velocity of User Stories selected for a Sprint, might vary at the end of the Sprint. This is natural. Product Owner also should understand that it might take two to three Sprints for the team to learn how they can honor their commitments and how to make commitments which they can honor.

Definition of Done

- Product Owner **defines** Definition of Done—the acceptance criteria for a User Story—that **must be met** by the development team.
- Definition of Done ensures that Product Backlog items are thoroughly tested and documented as required.
- Product Owner works with Scrum Master and Development Team to arrive at Definition of Done that is agreed by all the parties involved.
- Definition of Done **must be documented** along with User Stories and kept visible.

Daily Scrum

- Product Owner should attend this meeting **whenever possible**.
- Daily Scrum helps the team to manage their work and to unlock any impediments in a 24-hour time frame.
- Participation in Daily Scrum helps the Product Owner understand the progress made and find out if the team needs any help.
- Product Owner can share and update valuable information such as business inputs, tips on stakeholder engagement, etc.

- Product Owner ***should not interfere*** with the team during Daily Scrum. This interference can be in the form of suggesting tasks etc.
- Product Owner can ***raise questions*** during Daily Scrum when required.

Sprint Backlog and Sprint Burndown

- Sprint Backlog is a subset of Product Backlog. It is created for each Sprint, and it is owned by the Development Team whereas Product Backlog is owned by Product Owner.
- Sprint Backlog is created in Sprint Planning meeting, and the Development Team most likely updates it daily.
- For the Product Owner, Sprint Backlog is an Information Radiator to know how the team is progressing.
- Product Owner cannot use Sprint Backlog and Sprint Burndown for reporting progress to any stakeholder because it is for the Development Team to determine their progress toward the commitment made in Sprint Planning meeting.

Sprint Review

- This is the opportunity for various stakeholders such as marketing, sales, operations, etc. to investigate the product increment to gauge the actual development.
- Product Owner is a ***mandatory*** participant in this meeting and kicks off the meeting.
- Product Owner compares the completed increment against the originally planned one to assess the project progress.
- Product Owner considers only Product Backlog items that ***fully comply with Definition of Done*** during Sprint Review.
- Product Owner ***should not*** accept partially completed items or items that don't meet Definition of Done.
- Product Owner can ask the various stakeholders present at the meeting for their feedback toward Product Increment presented. This helps the Product Owner to manage Stakeholder expectations.

JUST-IN-TIME REVIEWS

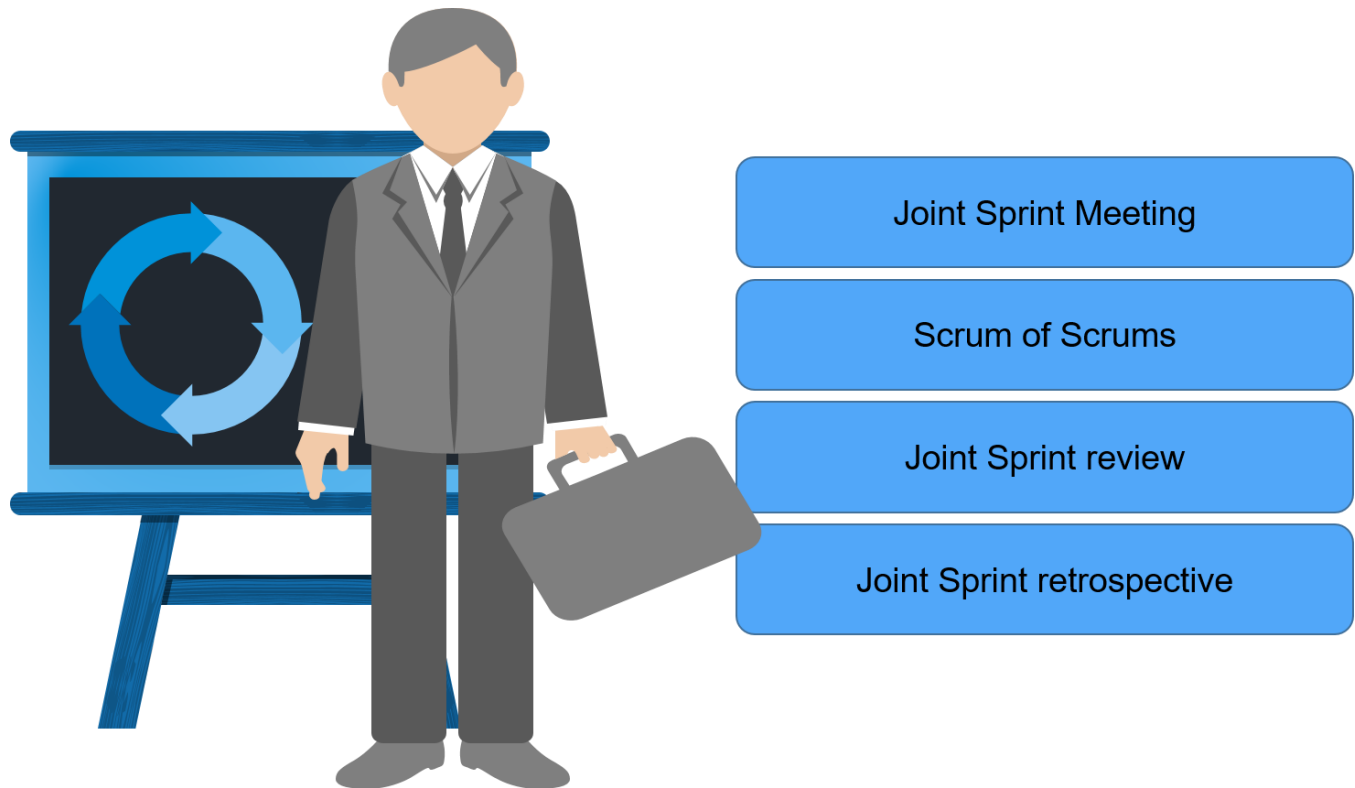
- There could be situations where a few User Stories can be completed before the Sprint Review.
- Product Owner need not wait to review them only at Sprint Review.
- Product Owner can request and conduct just-in-time reviews for items as they become complete and available for review.

Sprint Retrospective

- Product Owner can participate in Sprint Retrospectives.

- Sprint Retrospectives are opportunities for the team to look for improvements. Product Owner can provide the inputs on those improvements. This also helps the Product Owner to strengthen the relationship with team.

Product Owner in Large Project Sprint Meetings



JOINT SPRINT MEETING

- On a large project, when multiple teams are involved, conducting Sprint Planning meeting requires a lot of advance preparation and coordination.
- One approach is to have all teams or representatives from all teams meet at Sprint Planning and decide on a Sprint Goal, which has to be contributed by all the teams.
- Then the respective teams can do their planning in alignment with Sprint Goal and with all other teams.
- Then again, all the teams or representatives from all teams reconvene to put the pieces together for the complete project plan for that Sprint.

SCRUM OF SCRUMS

- Scrum of Scrums allow multiple teams to align, discuss, and coordinate on a daily basis throughout the Sprint.
- Team representatives can discuss the respective team's progress, impediments, and dependencies at the same time, and at the same location.

JOINT SPRINT REVIEW

- When multiple teams are involved, during Sprint Review, there is a possibility that each team presents its Product Increment.
- This can be overwhelming for Product Owner and other stakeholders as their focus can shift from one team to another – just like visiting multiple stalls at an exhibition.
- If possible, get all the teams in one room/location for a joint Sprint Review. If teams are located across, you can use Conferencing and other mechanisms for Joint Sprint Review.

JOINT SPRINT RETROSPECTIVE

- Teams tend to prefer their own retrospectives rather than the project level retrospective in multi-team projects. This is due to the psychology that teams do not like comparison with other teams.
- For optimal results, teams should broaden their retrospective boundaries beyond the team and toward the project—identify common improvement areas across teams and share their insights with each other.
- Team representatives can come together and hold a joint retrospective. Each team representative can present their team's findings and insights in a cross-team exchange of information.
- Open space workshops offer great ways to conduct joint Sprint Retrospectives with several project teams.

Common Mistakes

1. The bungee Product Owner
2. The passive Product Owner
3. Unsustainable pace
4. Smoke and mirrors
5. Reporting up and Sprint burndown



THE BUNGEE PRODUCT OWNER

- A bungee Product Owner makes an appearance at Sprint Planning, vanishes, and then resurfaces again at Sprint Review.
- Some Product Owners are not available during the Sprint, even over emails and calls. These are bungee Product Owners.
- They may depute Scrum Masters or Proxies for their role when they are not available.
- To combat this common mistake:
 - Ensure that Product Backlog Management is number one priority for Product Owner.
 - Product Owner is a full-time role on the project – he/she must collaborate with the team, be available throughout the project, review the work as and when necessary, and provide clarifications to Development Team throughout the project.

THE PASSIVE PRODUCT OWNER

- A few Product Owners act as bystanders that is, passively participating in Sprint Planning and Sprint Reviews. Physically they appear present, but may not respond to queries and clarifications.
- They may also not direct the team on Product Backlog Items proactively.
- To combat this common mistake:
 - Ensure your Product Owner is an active participant and actively contributes toward evolution of the product

UNSUSTAINABLE PACE

- Sprints always run back to back; as soon as one Sprint is over, another one starts.
- Some Product Owners may force team members to take more work than they are willing due to business time pressures and commitments.
- This may show a small increase in velocity, but in the long run, can't be sustained.
- Continuous application of such practices—asking the team to take more work than what they can commit—can turn the Sprints into **death marches** resulting in team members suffering burnout, falling ill, or deliberately applying for long leaves from the project.
- To combat this common mistake:
 - Product Owner must respect team's commitment and **should not force** more work.
 - If Product Owner feels that progress is slow, Product Owner can ask the team to come up with creative ways to improve the pace.

SMOKE AND MIRRORS

- A few teams will present slides and show Sprint Backlog items that might not have met Definition of Done.
- This kind of practice creates an illusion that the project is going great.
- To combat this common mistake:
 - Teams must carry out Sprint Review meetings and must focus **only on** those Backlog items that meet Definition of Done.

REPORTING UP THE SPRINT BURNDOWN

- Sprint Burndown and Sprint Burnup charts **are not** project progress reports.
- They are used by the teams for their daily work tracking and planning.
- To combat this common mistake:
 - Invite stakeholders and management to Sprint Review and Daily Scrum meetings.
 - Instead of using Sprint Burndown or Sprint Burnup, use Release Burndown or Release Burnup charts. Release Burnup/down charts provide better insight into project progress.