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Successful Scrum Adoption

Guidance for Organization – Co-existing with other approaches

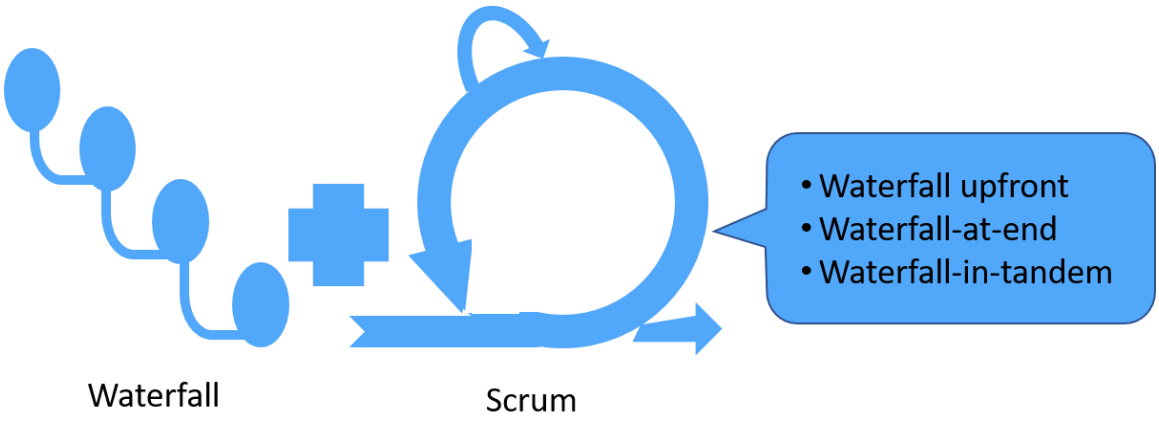
- Many organizations, before Scrum Adoption, will have had their own practices and software development methodologies.
- In a practical situation, Scrum may coexist with Waterfall, Project governance, and ISO processes such as ISO 9001 and CMMI.

Mixing Scrum with sequential development, that is, Waterfall

- During an Agile transformation and Scrum adoption, an organization may continue to use Waterfall and Scrum together.

Three scenarios of interaction

- The following are three scenarios of interaction between Waterfall and Scrum.



Waterfall upfront

- This occurs usually when an organization requires some documentation such as Project Charter (from PMI®) before a project is authorized, that is, approved.
- In such situations, teams may do some bare minimum documentation before the project is authorized or approved. They may also do some high-level requirement gathering and estimation.
- Later, the teams will follow Scrum.

Waterfall-at-end

- In this approach, teams will follow Scrum during development and toward end of the project. Intensive testing is done.
- Some teams may even dedicate a few Sprints exclusively for testing toward end of the project.

- During these Sprints, teams may follow Scrum meetings such as Daily Scrum.

Waterfall-in-tandem

- This situation may exist when two teams are working on the same project. One team may be following Scrum and another team may be following Waterfall.
- Coordinating work and frequent communication are two big problems faced in this approach.

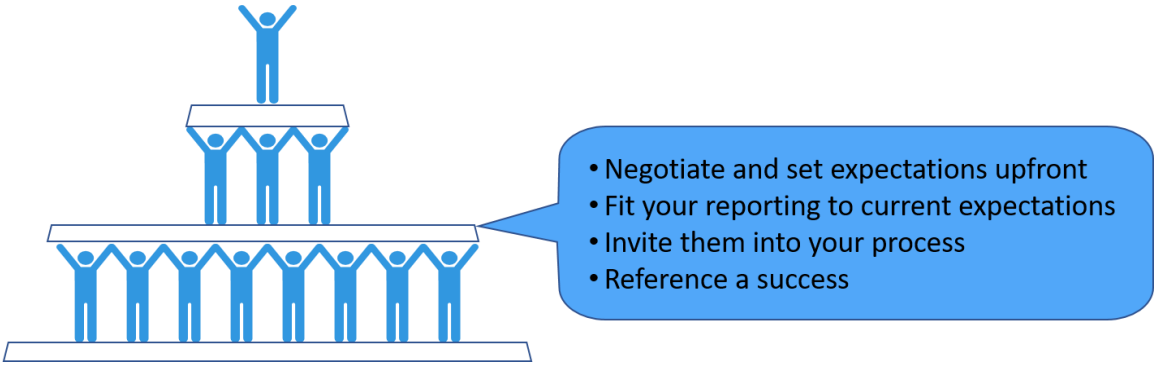
Three areas of conflict

- When Scrum and Waterfall co-exist, conflicts may arise in three areas.
    - Development process
    - Business processes (for example, short User Stories versus comprehensive documentation)
    - People (changed roles)
- To overcome these problems, implement these suggestions:
    - Do more analysis than Scrum would usually call for
    - Build up a process that is barely sufficient rather than strip a large process down
    - Define an architecture that compartmentalizes Scrum and sequential approaches
    - Adopt the Agile practices that work well, regardless of the process
    - Educate Stakeholders

Governance

- Project Governance is established and carried out to ensure that the project stays within the budget and timelines and that the product is developed as expected with required quality.
- Over the years, organizations have used Gates in their project as a review mechanism. Each of these gates acts as a checkpoint on project progress.
- For example, after requirement gathering, there is a Stage Gate where review of documentation is done and sign off is given. After analysis and design, there is one more gate review for approving the design.
- When using Scrum, organizations must realize first that Project Governance and Project Management are two different things – they are not the same.

Running Scrum Projects with non-agile governance



Negotiate and set expectations upfront

- Scrum projects may surprise existing Governance enforcement roles because the team is self-organizing; team members take decisions by themselves.
- Scrum teams must negotiate with Governance enforcement roles and set the expectations right at the beginning of the project itself.

Fit your reporting to current expectations

- Project Governance may require a Gantt Chart that shows project activities, weekly status reports, etc.
- Scrum teams should provide these expected reports instead of fighting against them.
- At the same time, Scrum teams can share Agile reports such as Burndown Charts to educate the users more about Agile way of reporting.

Invite them into your process

- Encourage Governance enforcement roles to attend Daily Scrums as silent spectators.
- Let them see Sprint Planning and reviews so they have first-hand feel of in-built governance mechanisms in Scrum.

Reference a Success

- Showcase a few successful Agile projects to Governance enforcement roles.
- Using this evidences, try to replicate the model onto future projects.

Compliance

- Most organizations specify compliance requirements, such as ISO 9001 and CMMI level 5, when their development work is outsourced.
- Though these standards don't prescribe any product development or software development methodologies, they may expect a sequential process to follow.

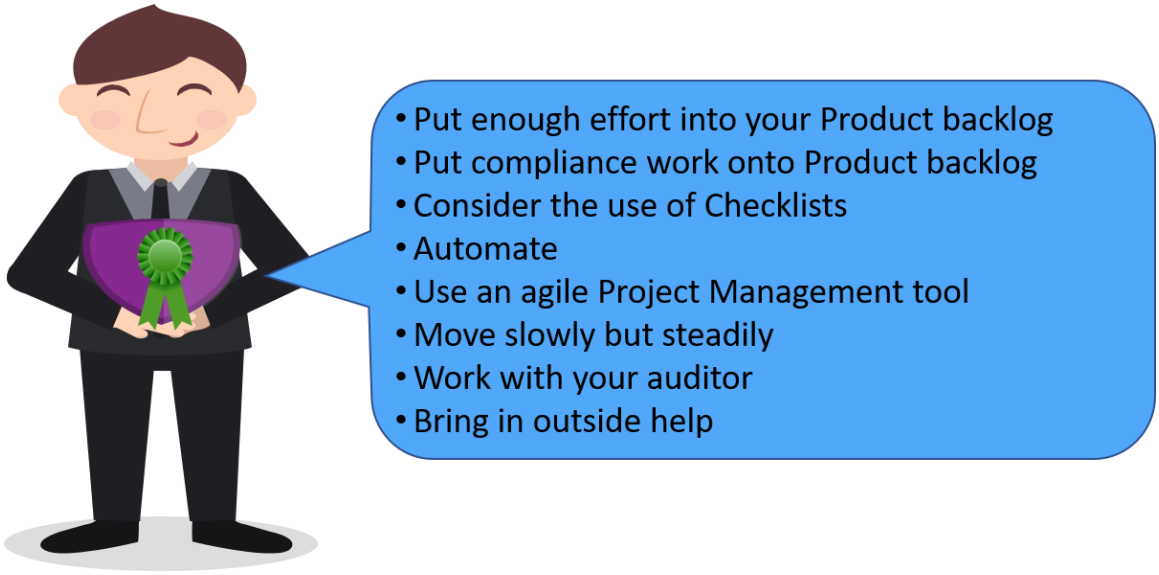
ISO 9001

- ISO 9001 mandates that a lengthy and exhaustive Quality Management System is to be prepared describing the quality practices followed by the organization.
- ISO 9001 may mandate that requirements must be documented in detail, reviewed, and approved.
- In such situations, teams may collate User Stories together into a single document, present it to Product Owner, and get it approved.
- In the essence, teams don't change their Scrum processes to suit ISO 9001. They offer compliance by presenting the required evidences for ISO 9001 from what they have, in the required format.

Capability Maturity Model Integration (CMMI)

- Most organizations have successfully integrated Scrum into CMMI.
- One study by the author of SW-CMM (Software Capability Maturity Model) found that Agile method XP compliments SW-CMM very well.
- In one organization, the CMMI auditors were impressed with transparent, easily accessible, and uniform project information that Scrum provides.
- One of the ultimate goals of CMMI is to improve how they build the software. Scrum or other Agile methods fit with CMMI perfectly by exactly addressing the improvements required.

Achieving Compliance



Put enough effort into your Product Backlog

- The effort required to meet compliance requirements should be added to Product Backlog.

- For example, User Stories can be created to satisfy compliance requirements such as required minimal documentation, collection of evidences, etc. These User Stories are estimated just like any other User Story.

Put compliance work onto Product Backlog

- The work required to meet compliance can go to Product Backlog so that it can be tracked.
- It also helps the Sponsors to know the cost of compliance work.

Consider the use of Checklists

- Usage of Checklist is a widespread practice in many organizations.
- Scrum's definition of done can be used to create a checklist for process compliance.

Automate

- Automation helps to meet compliance requirements as there is no manual intervention.

Use an Agile Project Management tool

- Traceability is an important consideration for many compliance standards.
- Scrum's information radiators such as task boards may not provide any traceability.
- This can be addressed by using an Agile Project Management tool

Move slowly but steadily

- All these standards allow organizations to define their own systems and processes.
- Instead of overnight revamp of existing processes, organizations can do this slowly and steadily using an iterative approach.

Work with your auditor

- Meet the auditor in advance, have an informal discussion on how Agile software development works, and get to know any red flags from compliance perspective.

Bring in outside help

- If required, bring in outside help, such as an experienced Scrum Master.