

Hybrid PM innovations: Joining the dots and becoming more efficient^{1, 2, 3}

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Abstract

As the proverb goes, necessity is the mother of invention, it has brought us from traditional project management methodologies to the newer project management methodologies.

From the extremities of the pure waterfall and pure Agile lies the hybrid approach. The beauty of the hybrid approach comes from deriving from the best of both worlds. Most of the practitioners understand best practices and apply lessons learned. Then why is there still a need for innovations in the hybrid approach?

Innovations are necessary to help keep in line with business objectives and help deliver the project to the market. The ability to tailor and add nuances that suit your company is one of the keys to delivering high value from a project management office.

While allowing well-organized teams to deliver value, reviewing, and applying the 30-60-90-day rule to project impact, performing quarterly value delivery reviews, performing risk management, and applying lessons learned will be some of the tweaks that will help to hit the home run. They will help to address the increased uncertainty and help to improve velocity and delivery across projects.

The paper aims to provide you with an understanding of what tailored processes have been successful and what can be the avoidable pitfalls.

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Introduction

Over the years, with innovation and newer technologies, has arisen the need for better tools and frameworks. This is no different for the Project Management world. A lot of the practitioners are well versed in the traditional waterfall methodology. The popularity of the Agile framework has steadily increased and has encouraged numerous practitioners to adopt those fundamentals. This is combined with the fact that the market and customer needs are evolving and changing quickly. The ability to react quickly to those changes is one of the keys to being successful. The traditional methodology reacts to change but at a huge cost as the resources have already been used to develop a solution. Any change in the requirements meaning that little or some part of the work can only be salvaged. So, what next? Another project management technique?

The answer lies not necessarily in finding new techniques but in using the best existing known techniques to solve the project problems. A hybrid approach that combines the best of both worlds is one such approach that is picking up pace. Based on a published report, 39% of the surveyed companies use hybrid project management approaches (thedigitalprojectmanager, 2021) (Hub Staff, 2021).

Considering changing customer requirements, and market demand the benefits of using a hybrid methodology can be viewed better as compared to using a single methodology.

Project Management Techniques

Waterfall Approach

An overview of the project management for waterfall methodology. It uses phases for the execution of the project. The waterfall model is a breakdown of project activities into linear sequential phases, where each phase depends on the deliverables of the previous one and corresponds to a specialization of tasks.

(Waterfall_model, 2022)

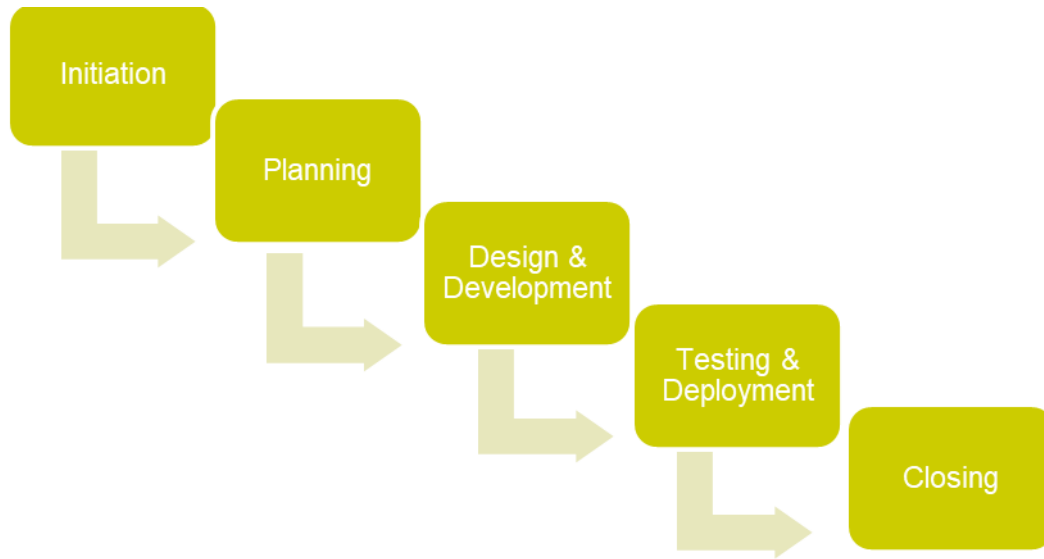


Figure 1: Waterfall Approach

As per PMI, the PMBOK® Guide notes the groups-

1. Project initiation - Identification of the need to create a project based on market research, customer demands, etc.
2. Project planning – Planning for the customer requirements, identifying the resources, etc. required for the project.
3. Project Execution – the phase of the project where designing, and implementation of the customer requirements are done along with the testing and feedback.
4. Project closure – Last phase where we close the project and realize the benefits of the project. Lessons learned and administrative closure of the project are completed in this phase.

Strengths of waterfall technique

- Well defined and documented set of activities.
- Entry-exit criteria for each phase are clearly defined.
- Milestones and dates (detailed plan) available.

Scrum Framework

Scrum is a lightweight framework that helps people, teams, and organizations generate value through adaptive solutions for complex problems. (Scrum.org, 2022). It follows the Agile Manifesto to favor more in terms of adaptability, and flexibility to customer needs. It encourages regular retrospection and adaptation.

SCRUM FRAMEWORK

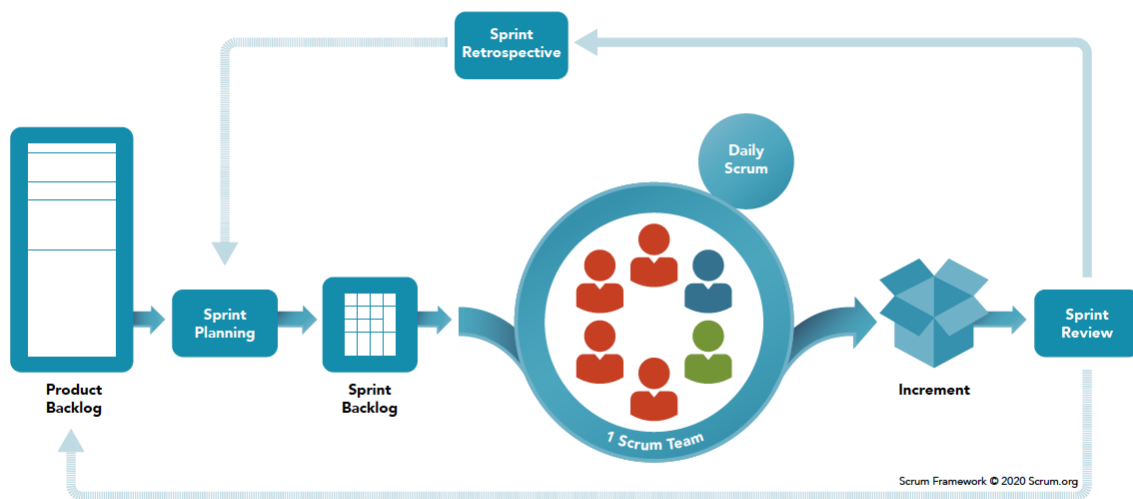


Figure 2: Scrum Framework (scrum.org, 2022)

Scrum focuses on a Product Backlog that is reviewed in Sprint Planning. This helps the teams in realizing the incremental goals in a shorter duration of the sprint (typically 2 weeks cycle). It is a framework that enables high-quality software in a set interval of time.

Strengths of agile include:

- Focus on customer needs over heavy documentation.
- Promotes frequent software delivery

Hybrid Approach

Joining the dots with waterfall and scrum to derive the best of both worlds (traditional with modern methodology) to create a new way of working/ method. This approach helps to reduce the feedback cycle and brings the focus back on the customer.

Project Planning – Traditional (Waterfall)

Project Execution – Agile (Scrum)

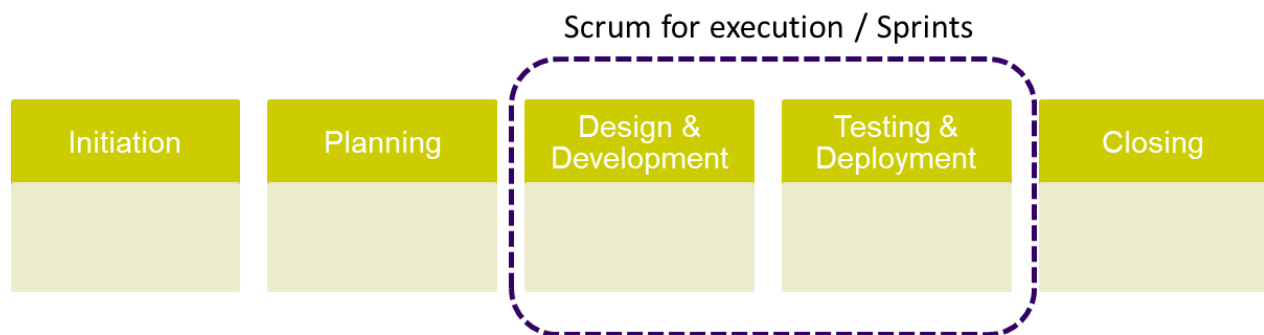


Figure 3: Hybrid Approach

For the development phase and testing & deployment, iterative agile sprints can be used. While the team develop in sprints, very specific goals are assigned to the scrum team. This allows for understanding complexity, and issues early in the development and paves way for the remaining work. This hugely shifts focus from the milestone (date) driven development to more achieving the goal the team has decided for themselves and the customer.

Tailoring the Process

Tailoring is a term used to describe the customization of the process. As per the PMBOK, tailoring a process is to choose a development approach best suited to the endeavor. (PMI.org, 2020). Process tailoring helps to ensure that the project management process is tweaked for success of the project. (PMI.org, n.d.)

When choosing hybrid methodologies, numerous options can be considering for tailoring. Some of the key ones, but not limited, to are as below-

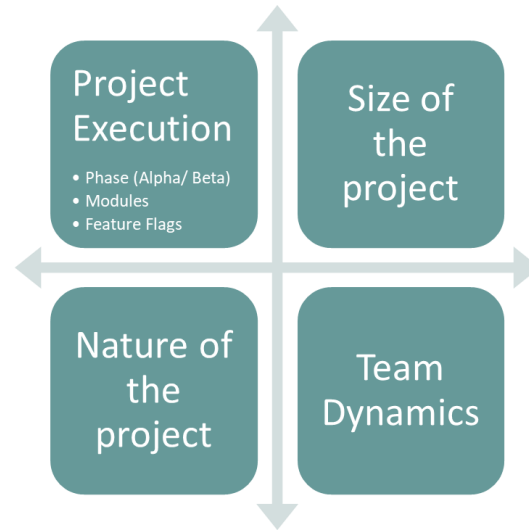


Figure 4: Process Tailoring

- 1) *Project Execution* – The project execution could be iteratively completed by breaking down the project into smaller phases (like alpha, beta) for quicker feedback from customers. Another option could be based on modules. Another option could be based on feature flags.
- 2) *Size of the project* – The size of the project could very well influence the tailoring process. A large multi-year complex project could very well qualify for the traditional method.
- 3) *Nature of the project* – The nature of the project can influence the project tailoring process quite a bit. For example, a support project with customer ticket resolution may have an alternate project management framework or methodology that suits it.
- 4) *Team Dynamics* – There is little scope for success for any project if there is no stakeholder buy-in. The team is one of the largest stakeholders and the process needs to be tailored keeping them in mind.

Innovations and Benefits

After the selection, tailoring, and benefits, how are we now joining the dots between what the customer wants to what the organization is asking for? What are the real benefits that the hybrid approach provides us in these dynamic customer requirements?

1. ***Align with the Vision*** – Using the concept of project charter from waterfall methodology and providing a holistic view of the project to the team, there is more alignment. The team gets an understanding of customer needs and encourages them to think from a

customer's perspective rather than just solving the problem. This promotes a lot of focus back to the customer which produces better results.

2. **Forecasting - 30-60-90 Day View** – While agile is all about being flexible, the organization still needs some level of information to go back to the customers for product or service releases. By providing the internal organization a view of how the project is burning up from a release perspective, a level of forecasting for completion can be achieved with some degree of accuracy. As the teams mature, the margin of error reduces.
3. **Quarterly Value Reviews** – Leveraging the concept of regular feedback within the organization from the agile framework, have a process framework that reviews the information regularly. Using Quarterly Reviews and focusing on value to the customer, impediment resolution, and teamwork, there are fewer surprises for everyone in case the project is not going as planned. This can be pivotal information as it helps to take more proactive steps than reactive steps to address customer or market needs. Quarterly Value Reviews also help to identify dependencies that span beyond the teams in the organization and thus helping to prioritize and align resources accordingly. Optimization of this value stream helps to reduce waste and better resource utilization.
4. **Risk Management** – Risk management is an important aspect of project management and using it within the iterative framework with scrum helps to surface problems and feed into forecasting. Even though team-level blockers are addressed, risk management that spans different teams helps to optimize resourcing or bring to the forefront the lack of resources. Organizational needs for information and project success can be level set with this piece of information.
5. **Lessons learned** – A concept in both agile and waterfall methodology, regular feedback, and incorporation is very valuable information to learn from projects and create organizational baselines. This promotes effective usage and team maturity also increases.

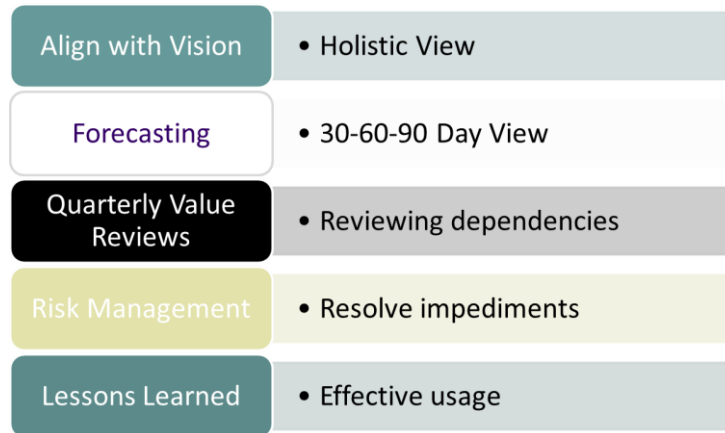


Figure 5: Innovations and Benefits

The above are only some of the key areas that help bridge the gaps when using hybrid methodologies. The benefits can be leveraged across projects that involve IT and non-IT teams and using different methodologies under the hybrid approach.

In Conclusion

Based on the above, hybrid methodology is a middle path that helps to answer some of the questions that influence the market needs, customers' ask, and the bottom line. There is no magic bullet that is a perfect project management process and as mentioned the project management process needs to be tailored considering numerous factors.

However, there is substantial value that is brought to the table with better team alignment to the overall company vision and customer needs. When the focus shifts to resolving problems for the customer than just “development work”, there is a paradigm shift that benefits everyone.

The key thing to keep in mind is this is a learning and maturing curve. Start slow and make incremental changes to gain momentum and it will lead to multiple project success stories.

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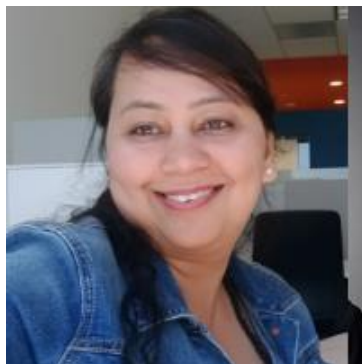
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Shikha Saka is an accomplished IT project management practitioner with expertise in the areas of IT management in Agile, waterfall, and hybrid methodologies, Product roadmap planning, resource management, and delivery. She has experience in Real Estate, Airlines, logistics sector and has helped with enterprise-wide IT migrations, development and application management, application operations and maintenance, Application support engagements, analytical platform. She has a master's degree in engineering and is certified PMP, CSM, ACSM, and ITIL.