

Applying Agile Methods of Speed, Efficiency, and Alignment for Successful Project Results

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To survive, evolve, and thrive is to be able to adapt to a sometimes chaotic and constantly changing environment. Nowhere is this more important than on the battlefield, where military commanders arm soldiers with a strategic plan while continually adjusting that plan through changing tactical maneuvers. This requires rapidly evolving the strategic plan through agility, speed, quick critical thinking skills, and continual improvements.

This same approach applies to project management, where a logically sequenced, linear project management methodology based on critical path analysis and models that include schedule estimates, inter-related tasks, milestones, and deliverables anchors a project team at the strategic level. However, successful project teams also apply the flexibility,

speed, adaptability, and efficiency of agile processes at the tactical level as a means to maintain and/or accelerate project schedule while improving quality and customer value at reduced costs.

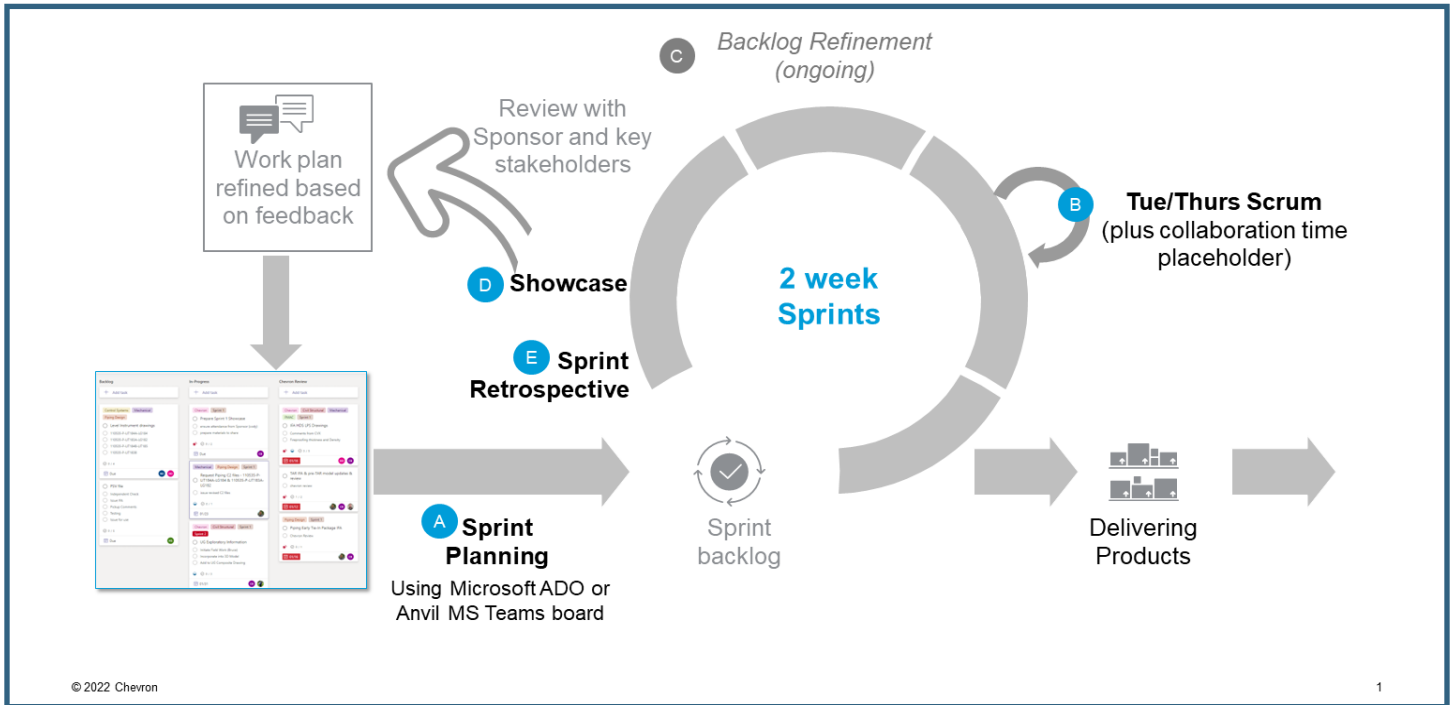
Agile Methodology

Agile project management roots stem from the Kaizen philosophy of leaning out processes, tools, and systems through small, ongoing, incremental continuous improvements to reap significant benefits.

Agile is a client-focused, “fit-for-purpose” approach to project management where products are designed and built in short cycles called “sprints” in response to rapid changes to the project plan, schedule, budget, and final deliverable.

Agile methodology builds on the Kaizen philosophy of continuous improvement by breaking a project into phases called “sprints” to tackle tasks along the critical path.

Scrum teams tackle tasks along the critical path by breaking down schedule activities into User Stories executed in two-week sprints. User Stories are schedule milestones, deliverables, or issues that need to be addressed.



Within the phases are iterative cycles of planning and executing tasks and evaluating the results to continually initiate change throughout a project’s lifecycle.

Sprints have a predetermined time frame, generally lasting a week or two and not more than a month. Agile “scrum” teams that run the sprints work towards completing goals for each sprint within the assigned timeframe.

Aligned Agile Scrum Teams Run in Sprints

Instrumental to achieving the goals for each sprint, agile scrum teams conduct frequent standup / scrum meetings to discuss what has been done, what needs to be done and in what order, and what obstacles to tackle to meet goals and achieve success.

The goal of sprints and scrum teams is to debottleneck the project schedule by continually fixing issues, prioritizing work, managing risks, and implementing lessons learned at the task level. This collaborative, problem solving approach helps teams continuously deliver throughout a project.

User Stories are captured in either the “Planner” tab in Teams or the Microsoft Azure DevOps (ADO) platform.

Both dashboards visually help a scrum team manage work by assigning responsibilities, tracking tasks and due dates, identifying risks, mitigation strategies and next steps, and documenting decisions made.

Through agile, project teams can rapidly identify, assess, and mitigate risks much quicker than on a traditional project.

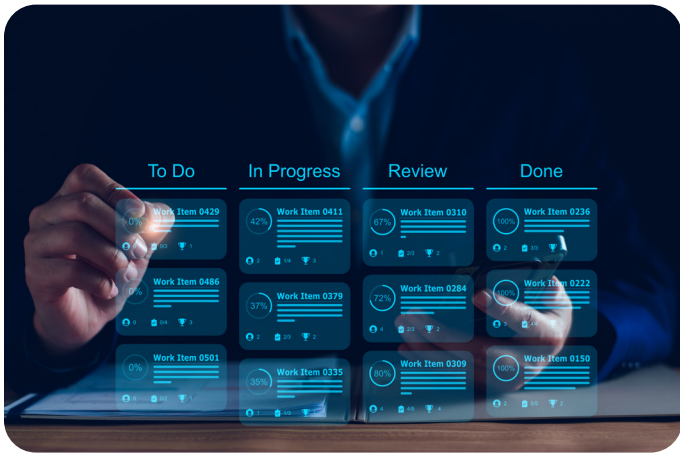
Besides reviewing User Stories labeled as “Help Needed” for status updates, key areas of discussion during a scrum meeting include the following:

- What has been done to progress the sprint goal?
- What are we doing in the next day or two to progress to the sprint goal?
- Are there any impediments or roadblocks?

Consensus is achieved on the status of each User Story by the end of each scrum session, whether in progress, on hold, or sent to the project owner (PO) for review.

Critical to the team's success include buy-in by all agile team members and scrums run by a dedicated facilitator.

This collaborative, transparent, problem-solving approach in the scrums helps agile teams set priorities, identify issues sooner, fix the issues, manage risk, and continually deliver throughout the project. As a result, schedule roadblocks are eliminated much faster than usual.



On a recent complex brownfield project, for example, the client/Anvil/subcontractor scrum team maintained a continual tempo of improvements throughout the project's life cycle by managing their work in two-week sprints.

Led by a client scrum master, the scrum team prioritized tasks and pivoted projects every few days to ensure that they could manage the tasks on the critical path schedule with multiple inputs, client engagements, and client reviews.

Through this collaborative and transparent process, the agile project team rapidly determined a course of action to stay on schedule and to stay on top of assigned tasks, deliverables, and team member due dates.

In addition to the two-week sprints and frequent scrums, the agile project team conducted the following:

- Showcase meetings where they shared successes and lessons learned and requested help from - and received feedback from the client management team.
- A retrospective meeting at the end of each sprint

where the team reviewed what went well and not so well regarding the agile process. As agile was new to most of the integrated team members, the retrospective session created initiatives to improve the agile process. Retrospective meetings are also a wonderful way to recognize the team or individuals for their achievements that sprint.

By simultaneously prioritizing and managing tasks while executing the work and mitigating risks along the way, the client/Anvil/subcontractor scrum team was able to innovate faster, deliver better customer value, improve the product delivery process, reduce project cost, and exceed schedule by six weeks.

“Agile is not just about efficiency, it’s also about delivering better customer value,” noted Jessica Begay, Anvil Project Manager. “Another thing that has impressed me about the agile process is the level of engagement we receive from the client and how quickly we can resolve issues.”

During a recent Anvil client project, it was identified that one of the flow meters did not meet design requirements. Within two weeks, the agile scrum team fully developed the options, met with the vendors, and secured buy-in from all the key stakeholders on the recommended path forward.



In a traditional project, it can take weeks to reach team consensus as team members have to wait until the next weekly meeting for a client review or to involve a subject matter expert. During the Anvil client project, all team members understood the urgency of ensuring that the flow meters meet design requirements. As a result, they held continual, if not daily, meetings to rapidly make decisions and reach consensus to maintain schedule.

Key Ingredients of a Successful Agile Framework

#1: Flexibility and Engagement

As information continually changes throughout a project, the role of the agile project team is to constantly stay engaged, juggle and prioritize tasks and allocate resources in a rapidly evolving, iterative improvement environment based on changing client needs and requirements and a high level of customer input. The ability to rapidly adapt, obtain quick input from key stakeholders and to optimize work while staying on the course is what drives a successful project and long-term results.

#2: Alignment in Processes, Tools, Information, and Team Expectations

Aligning all team members with the same information, rules, tasks, and set of expectations creates a highly efficient process that drives down cost, schedule, and risk while producing high quality products and services. Aligning data, metrics, and processes paves the foundation for consistency that then becomes the springboard for agility, speed, and efficiency.

#3: Training and Education in Agile Methodology

Scrum teams that scramble the fastest out of the gate at the beginning of each sprint are those that have the training, skills, and experience in working in an agile environment to successfully reach the finish line. It is the role of management to fully support and promote agile training and education to build productive agile teams.

Summary

In summary, agile is a highly effective process for projects of all sizes, particularly large, complex, schedule-driven projects. Agile is about collaboration, communication, and accountability as well as speed, efficiency, and continual improvement. It's about change, constant learning, creative problem-solving, and the ability to embrace risk. Through the inclusion of different ideas, perspectives, knowledge, and experience, all voices in an agile team are heard and ideas vetted to achieve the optimal solution.

The results? Higher quality deliverables, better processes, increased team collaboration throughout the project lifecycle, mitigated risk, reduced costs and schedule, and increased client satisfaction ratings.

