Agile PROJECT MANAGEMENT

There's no doubt Agile has taken the project management world—and many organizations—by storm. While it was initially developed for the software industry, it has crept into many industries to help streamline processes and help teams build and evolve products incrementally, iteratively, and collaboratively.

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The biggest thing to understand about Agile is that it's a set of values and principles, which are outlined in the Agile Manifesto. While Agile itself is not a process, many practices were born out of its values and principles, including Scrum, Kanban, Lean, Crystal, and Extreme Programming, just to name a few.

For the purpose of this course, we're discussing the basics of Agile and focusing in on Scrum, which happens to be one of the most widely used Agile methods.

Key points:

- Agile was developed for the software industry, so the core tenets relate most closely to development teams. That said, many other organizations and team types have adopted Agile methods with varying levels of success.
- It's important to remember that Agile isn't a process as much as a behavior. Agile values and principles focus on collaboration, iteration, and the ability to adapt to change. Review the values and principles below, or check out the Agile Manifesto at agilemanifesto.org.
- There are multiple frameworks teams can use to be Agile, but all focus on Agile's

stated principles and values and remove barriers to collaboration with teams and stakeholders.

- Scopes and timelines are fluid with Agile. The goal is to deliver working products incrementally in sprints, improving and iterating on it over time or in additional sprints.
- Agile teams are 100% dedicated to one project and self-organize so they work together to plan work done in sprints and collaborate often to meet goals.

THE HISTORY OF
Agile

Many ideas for better ways to deliver software formed from the 1970s on. But in 2001, 17 software developers met at a resort in Snowbird, Utah, to discuss lightweight development methods because they were fed up with traditional approaches and wanted to form a rallying cry to their industry to be better, faster, and more collaborative.

Together they published the Manifesto for Agile Software Development, which is rooted in adaptive planning, early delivery, and continuous improvement—all with an eye toward being able to respond to change quickly and easily.

In order to be truly Agile, you must understand and follow the values and principles stated in the Agile Manifesto:

AGILE VALUES

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

PRINCIPLES OF AGILE:

1. Customer satisfaction by early and continuous delivery of valuable software
2. Welcome changing requirements, even in late development
3. Working software is delivered frequently (weeks rather than months)
4. Close, daily cooperation between business people and developers
5. Projects are built around motivated individuals who should be trusted
6. Face-to-face conversation is the best form of communication (colocation)
7. Working software is the primary measure of progress
8. Sustainable development, able to maintain a constant pace
9. Continuous attention to technical excellence and good design
10. Simplicity—the art of maximizing the amount of work not done—is essential

11. Best architectures, requirements, and designs emerge from self-organizing teams
12. The team regularly reflects on how to become more effective and adjusts accordingly

HOW TO BE AGILE WITH SCRUM

Agile principles and values are employed really well in the Scrum methodology. Scrum is the most popular Agile development framework because it's relatively simple to implement. It also solves a lot of problems software developers have struggled with in the past, such as convoluted development cycles, inflexible project plans, delayed production, poor collaboration, and more.

THE SCRUM TEAM

In Scrum, the vision for the project and the priority of its features are determined by a **product owner**, who is closest to the product's goals, stakeholders, and users. The work is done by a **development team** who's 100% dedicated to a single project and works in short cycles called sprints.

Scrum teams are self-sufficient and don't need a traditional project manager. Instead, the team is led by a **Scrum Master** whose main job is to clear away all obstacles to work getting done more efficiently. The Scrum Master also facilitates all of the Scrum ceremonies, or meetings, to help guide the team through the process.
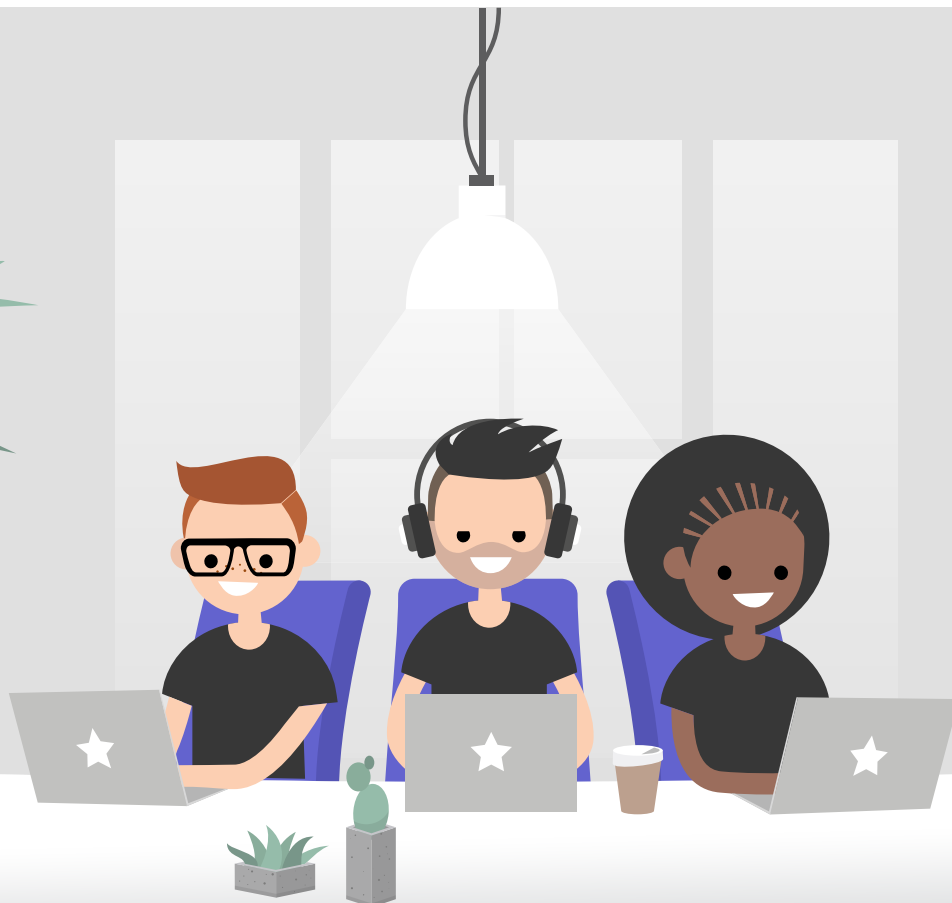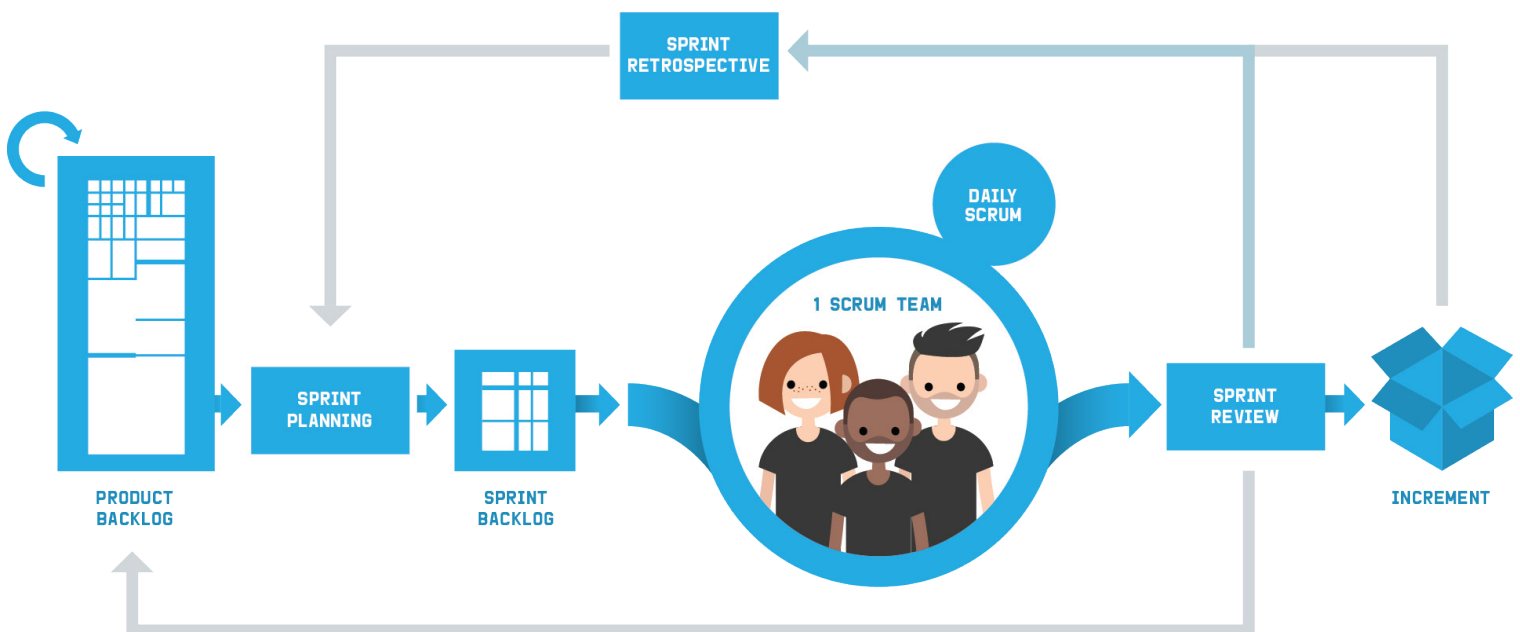
SCRUM CEREMONIES

The Scrum process is made up of a series of events surrounding sprints, when work is completed. Sprints are completed in cycles, and the ceremonies help structure the sprint by using a product backlog of features or user stories to direct the work being done.

The product backlog is essentially a list of all features or stories to be accomplished on the project. It's typically owned by the product owner, who can set the priority of work to be done and even make decisions about work to be added or removed based on the needs of the user or client.

Let's take a closer look at the Scrum ceremonies that help teams give sprints structure.

SPRINT PLANNING

A sprint typically lasts anywhere between 2 and 4 weeks, with the goal of delivering a working product (or part of it). Sprint planning enables the team to estimate tasks or

SPRINT RETROSPECTIVE

DAILY SCRUM

1 SCRUM TEAM

PRODUCT BACKLOG

SPRINT PLANNING

SPRINT BACKLOG

SPRINT REVIEW

INCREMENT

stories and determine what work they'll take on in the sprint backlog, which essentially serves as the task list for the next sprint.

DAILY SCRUM

This is a daily check-in where the team gets together to talk about what they worked on yesterday, what they're doing today, and if there are any blockers in their way.

SPRINT REVIEW

In this meeting, the whole team sits down with stakeholders to review or demo work done in the sprint and get feedback or approvals.

SPRINT RETROSPECTIVES

This is an important meeting where the team talks through what worked and what didn't in the last sprint and commits to making changes together to be better.

Once the development team completes a sprint cycle, they start over and continue with the next priority, based on the prioritization of work waiting for them in the backlog. Scrum is super-flexible, but does require a level of management and guidance to ensure teams are free of blockers and can continue to build on and improve products.

ADDITIONAL AGILE METHODS

While Scrum is the focus of this course, you should know there are other methods to explore and add to your Agile toolkit.

KANBAN

In 1953, Toyota adapted supermarket inventory control process logic to their machine shop and officially used a "signboard" or "billboard," which is the literal translation of the Japanese word *kanban*.

This visual approach puts time and resources aside and focuses on tasks. In fact, Kanban helps teams make decisions on what to produce, when to produce it, and how much of it to produce. If you've used a tool that shows cards move through a progression of states to indicate where it is in process, you've used a Kanban board.

Many Agile teams use Kanban boards to remain transparent about where their work stands in process. The visual management of the board allows teams to quickly point out and understand project obstacles, discuss them, and collaborate on ways to get past them. You'll find a lot of digital project teams using Kanban methods to manage their workflow.

EXTREME PROGRAMMING (XP)

Want to take your method to the next level—or the extreme? Well, check out XP, which was created by software engineer Kent Beck in the 1990s during his work on a payroll project at Chrysler.

This Agile methodology is intended to improve quality by responding quickly to change. If you work on projects with shifting requirements and continuous feedback and know change can happen—and is normal—Extreme Programming might be for you.

XP describes 4 basic activities that are performed in the software development process that allow for change and rapid revision: coding, testing, listening, and designing. Teams organize in shorter sprints and can immediately change the course of work being planned or executed.

ADAPTIVE PROJECT FRAMEWORK (APF)

This one may resonate with project managers who recognize that you have to adapt your methodology to the project's goals.

With APF, you document project requirements, functions, subfunctions, and features before determining project goals. The team then operates in iterative stages rather than sprints, but stakeholders can change the project scope at the start of each stage. So, truly, you adapt to the project—and its people.

WHEN TO USE AGILE

Only you can be sure when your project management methodology is working for you. But if your organization aligns with the values and principles of Agile and you've bought into and trained on Scrum, Kanban, Lean, or other methods, you'll still want to consider the project, people, and other factors.

Here are a few examples of when Agile works well:

- You're implementing changes to a product and have the ability to do it incrementally, test and gain feedback, and iterate.
- You have an idea, but maybe not a full set of requirements for what you're creating.
- You've got a team who can be fully focused on one project.
- You don't have to worry about dependencies within or outside of the project (i.e., your project stands alone).
- You don't have to deal with managers who want clear timelines with distinct phases, tasks, or dependencies.

INDUSTRIES THAT USE AGILE

Any industry that has some level of uncertainty can use Agile. Those may include, but are certainly not limited to:

- Software development
- Product and service companies
- Digital agencies
- Marketing
- Distribution
- Automobile design
- Design and engineering

AGILE WORKS BEST FOR TEAMS WHO ARE:

- Experienced and accountable to tasks, with the ability to self-organize
- Trained in the ways of Agile and Scrum
- Open to change and rework when needed
- Open to tight collaboration as a team and with users
- Adaptable to the cadence surrounding sprints, which can feel very demanding and structured

YOU SHOULD AVOID AGILE WHEN:

- Your project is very urgent, and you must meet a very short deadline.
- Your project is too complex and difficult to break down into stories or even smaller, sizeable tasks.
- Your team is inexperienced and can't self-organize and meet goals on their own without task management.
- Your stakeholders require every step, turn, or move to be documented.
- Your stakeholders want the ability to provide feedback and approvals at every stage and require a lot of time to do that.
- Your organization is not educated and invested in Agile.

ADVANTAGES OF AGILE PROJECT MANAGEMENT:

- **Focus on quality:** Because products are built collaboratively and tested during sprint cycles, the product has many eyes on it at all times. And the flexibility of the process enables teams to pivot and make a change for the better if something's not working well.
- **Lightweight process:** Scrum offers a light framework for helping teams work together. Lower-level documentation and collaboration through ceremonies means the focus is on rapid delivery and iteration.
- **Continuing evaluation and optimization:** The measuring and evaluating of the work—and how it's done—allows accurate and early visibility into the progress, or even problems, with a project. Plus, sprint reviews regularly open the door to act on feedback faster.
- **Reduced risk:** Agile methodologies virtually eliminate the chances of absolute project failure—unless a team is just not performing well. But the fact that teams work in sprints toward releasing a working product means there is always progress. Even if that progress is open to change, a team is working toward goals set by the product owner.
- **High customer satisfaction:** Because change is easy to adapt to in a Scrum framework, customers tend to be happy because they have a higher probability of getting what they want.

THINGS TO CONSIDER WITH AGILE PROJECT MANAGEMENT:

- **Changing behaviors:** Agile requires not only a project manager or team to buy into the values and principles, but the entire organization. And that can be difficult because change is hard for many people. In order to make a full "Agile transformation," teams need to be trained and fully invested in the methods.
- **Understanding and embracing roles:** Scrum roles are important, especially when it comes to the product owner and Scrum Master. And it can be tough to find trained individuals who can write user stories properly, manage conflicting priorities, and facilitate work successfully. Remember, training is necessary to make Scrum work well.
- **Lack of dedicated cross-functional teams:** If your team is pulled in several directions or simply assigned to more than one project, they will not be able to dedicate themselves to a single project and the rest of their team. That will lead to a breakdown in process, collaboration, and team morale.
- **Collaboration:** If your team doesn't work in a space where they can freely meet and talk—or have the resources to do so remotely—you'll end up in silos. And when that happens, the spirit of Agile breaks down.

KEEP BETTER TRACK OF YOUR AGILE PROJECTS WITH TEAMGANTT

We know that you wouldn't typically relate gantt charts to Agile, but it's easy to do with TeamGantt! In fact, lots of our customers run Agile (or Agile-ish) projects and use TeamGantt to help keep the details straight.

Here are just a few ways TeamGantt can make managing projects a breeze for you:

- **Plan faster.** Get up and running quickly, and share online plan drafts with your team to get quick buy-in and longer-term accountability.
- **Manage sprints.** By using our new boards feature or the TeamGantt
- Power-up for Trello, you can manage user stories or tasks within sprints.
- **Untangle project complexity.** With TeamGantt, you can view and share gantt charts with ease and ensure everyone has a full-picture view of your projects.
- **Make change easy.** Update your gantt chart in real time by simply dragging and dropping tasks that need to be rescheduled.
- **Easy team collaboration.** TeamGantt is your one-stop project hub for your team and stakeholders. You can schedule and track tasks, share documents, post notes and comments, plan and review team availability, and even estimate and track time all in one place.
- **Review progress in one click.** Check in on the task level to make sure things are moving along or to let someone know a task is coming due. Or generate overall project health and time reports to keep a constant finger on the pulse of your projects.