

AGILE



AGILE DEFINITION

A simplified, iterative approach to project management that involves CI at every stage to help teams respond to customers faster, and with more flexibility.

A philosophy for teams' ability to consistently deliver (products) faster and better through a repeated process of breaking down a project into iterations (smaller, incremental steps), until the desired outcome is achieved.

MINDSET AND PRINCIPLES

Created in 2001 by 17 software developers, Agile sought a solution to traditional, complicated, time-consuming, and restrictive development processes and standards.

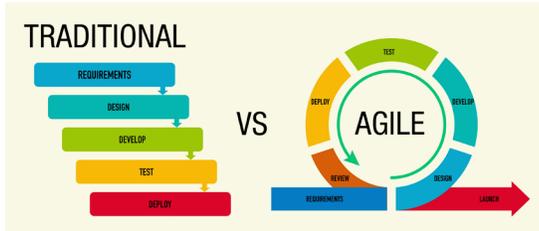
The developers outlined 12 principles that guide the Agile philosophy in a document called the "**Agile Manifesto**," which also describes Agile's four core values of: individuals and interactions, working software, customer collaboration, and responding to change.

While application of the values can vary, they share these common elements: 1) identify scope of project, end goal, and project team; 2) create roadmap; 3) release planning; 4) Sprint planning, development, and delivery; 5) daily stand-ups (to immediately address issues); 6) Sprint review and feedback.

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PROJECT MANAGEMENT: AGILE VS. TRADITIONAL APPROACH

Traditional project management is typically long, linear, and rigid, often only revealing issues to be addressed once the project has ended.



On the other hand, Agile's iterative, continuous improvement approach is used for a wide variety of projects that are more complex/uncertain and time-sensitive, and that require flexibility and involve a lot of customer interaction (i.e., software development, website design, R&D, financial services, marketing, construction projects, even wedding planning!).

Agile has become a project management method of choice for organizations in a variety of industries, because it offers a way to break up complex projects into smaller phases. This allows for changes to be made and corrective actions to be taken throughout the project's lifecycle, thus avoiding surprises once the project is completed.

AGILE AND LEAN

Agile and Lean share the same key goal — how best to deliver customer value through customer feedback and cross-functional, collaborative teamwork. Strong reliance on teams is critical to Agile's and Lean's success. An Agile team should be self-directed, including members with broad and diverse experiences and skills. It is best if teams are kept small and members' time is 100% dedicated to the project.

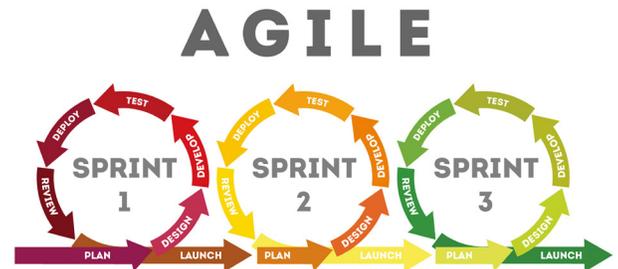
While many strategies used to achieve the goal of delivering customer value are the same (minimize waste, increase speed, improve quality, improve process efficiency, visual management, within a CI mindset), some of the approaches vary.

In general, Lean focuses on optimizing the repeatable, production/administrative process (quality at the source, right the first time — rework is considered waste), while Agile focuses on optimizing the creative, development process (where variation and rework are expected), one iteration at a time, in Scrum Sprints (see next section).

TWO MOST WIDELY USED AGILE METHODOLOGIES

Of all the Agile project management methods (Extreme Programming, Feature Driven Development, Crystal, etc.), the most popular are Kanban and Scrum. While they're both rooted in the CI/Lean methodologies of pull scheduling, and making workflow more visual to monitor, manage, and improve, they are used for different types of projects:

- **Kanban** is a Japanese term meaning "signal," or "visual sign." Used in Lean to manage pull flows, Kanban makes things visual, is more flexible, and is often used on top of an existing CI system. Kanban can be used in construction and engineering projects, event planning, automotive assembly, marketing production, report development, etc.
- **Scrum** is more rigid and requires a structured, fixed set of roles and responsibilities. It is most useful for small projects with complex problems, where an iterative process can be used to reach a well-defined goal (i.e., areas of innovation, marketing campaigns, product releases, and website redesign).
 - **Sprints** are a component of Scrum: each Scrum Sprint development cycle (or Sprint) is typically run for a period of 2 weeks. Teams then meet after each cycle to reset and review progress, make adjustments, and quickly apply them to the next cycle.



QUICK TIP – GETTING STARTED WITH AGILE

Keep in mind that Agile originated in the principles of Lean manufacturing and team-based, process-improvement. An easy way to get started with Agile is to quickly adopt a few simple, fundamental CI activities, such as: scheduling standup meetings prior to each shift, holding weekly planning meetings, and creating visual boards to share information and prioritize work. These activities foster teamwork, problem-solving, collaboration, visual management, etc.

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BENEFITS OF AGILE

Fundamentally, Agile promotes a flexible, responsive, adaptive, visible, iterative process that delivers value and quality to the customer and fosters a CI culture of creativity and innovation. Complex problems are broken down into manageable, actionable solutions and benefits are recognized organization-wide. They include:

- Increased flexibility and adaptability
- Improved communication and teamwork
- Increased daily visibility, awareness, planning and control of project progress
- Improved quality and efficiency
- Shorter cycles
- Increased responsiveness to change and to customer satisfaction
- Reduced time-to-market
- Improved employee satisfaction (less non-productive work)
- Lower costs
- Decreased overhead

AGILE METRICS

Agile metrics typically fall under customer and employee satisfaction, and operational and financial performance. Preferred Agile metrics are those which are outcome-based (measure *the value* created/delivered by the completed work), vs. output-based (measure *the amount* of completed work in a given period). Value delivery vs. product delivery. See below for a sample list:

- Sprint Burndown Charts (outstanding work)
- Velocity (total work effort)
- Time to Market (lead time)
- NPS (Net Promoter Score) — (customer satisfaction)

- Employee Productivity and Team Engagement Score (team morale/satisfaction)
- Full-time Employee Cost Reduction
- Technical quality / defect measurements / code coverage
- Business Value Delivered

AGILE IN THE WORKPLACE

As noted above, the usefulness of the Agile Methodology goes far beyond its origin in software development. [Click here](#) for a look at the Industry Week article, “John Deere takes an Agile Approach to an ERP Upgrade,” for insight on the benefits of applying Agile principles in ERP.

AGILE, RHYMES WITH

Versatile. At first, Deacon was impressed with Zoe in her new role as coffee shop manager. She'd proven to be a versatile leader. He'd watched as she worked with the staff to break down complex projects into smaller, manageable tasks keeping things running smoothly and delighting the customers. Then, suddenly, he was becoming aware of gross inconsistencies in her performance. Turns out, Zoe's identical twin, Chloe, was filling in for her; clearly Chloe did not share her sister's versatility and leadership skills. Much to Deacon's dismay, he had to let them both go. Sip happens.

INSIGHTFUL QUOTE ON AGILE

“Intelligence is the ability to adapt to change.”
Stephen Hawking

