Agile methodology

Justin,Neufeld/Desmond Neufeld

Date:08-02-2025

Introduction:

Traditional project management methodologies, with their rigid, sequential phases and extensive upfront planning, often struggled to adapt to the swift and unpredictable changes inherent in modern technological landscapes. This inflexibility frequently led to delayed deliveries, budget overruns, and solutions that no longer met evolving market demands by the time they were fully implemented.

In response to these challenges, Agile emerged as a dynamic and adaptive framework. Agile is a reactionary process that prioritizes quick releases and iteration over extensive upfront planning and a single, comprehensive functional release, fostering innovation and delivering value in complex environments.

Its core philosophy is centered on fostering continuous innovation and delivering incremental value within complex and uncertain environments. Unlike traditional methods that prioritize exhaustive planning and a single, comprehensive functional release, Agile is a highly iterative and responsive process. It emphasizes quick release cycles and continuous iteration, allowing teams to gather feedback early and frequently, adapt to changing requirements, and deliver working software or solutions in smaller, manageable increments. This iterative approach ensures that projects remain aligned with user needs and market shifts throughout their lifecycle, ultimately leading to more successful and relevant outcomes.

Body:

Agile methodology breaks down projects into manageable parts, following a cyclical process. It begins with a flexible planning phase, ranging from a loose idea to a structured outline. This is followed by the design phase, where initial plans are refined, forming the blueprint for implementation.

The development stage then brings the product to life. Next, the testing phase allows developers to identify and address necessary fixes. Following testing, deployment makes the product accessible to users, gathering crucial feedback. The final step is the review phase, where customer and other feedback is collected, feeding back into the initial planning stage to continue the cycle. (Laoyan, S. (2025, February 20)

Agile is a framework that is used to organise the work flow of teams like programming teams. This framework allows teams to adapt to the ever-changing landscape of technology and end user needs.(Laoyan, S. (2025, February 20)

It is meant to be like its name Agile or adaptable. Agile focuses on releasing projects as they go and using feedback to alter the project over all.

In contrast traditional methods like the waterfall method are a more strict top down framework relying on strict planning from before creation and testing and releasing solid products that adhere to a strict plan and testing standards. This makes it a great engineering framework, as realising a car without doors isn't a good idea. (Adobe for Business Team, A. for B. T. (n.d.)

Frameworks,like Agile, focus on collaboration and creativity over strict adherence to protocol. This framework does not present a “by the book” feel. It gives team members more flexibility to create and innovate beyond the rules and standard practices. This fosters an environment where "continuous improvement and delivery” can happen even when the solution lies outside of the normal or standardized methodology. (Laoyan, S. (2025, February 20)

In contrast frameworks like waterfall do not allow for the same flexibility in the innovation process. Waterfall stands more on procedure and initial planning, than on the fly changes. The advantage of this is to produce a uniformly working product rather than a consistent iteration release like in Agile. (Atlassian. (n.d.).

Frameworks like waterfall introduce strict standards of documentation. (Atlassian. (n.d.) Whereas systems like Agile prioritise working end products over meticulous documentation. This is one of the drawbacks to systems like Agile. Just because it works does not mean it will always work. Documentation and proper user management like writing manuals can save hours of problem solving down the road. (Laoyan, S. (2025, February 20)

Agile offers significant benefits for customers, prioritizing user experience over extensive documentation. Unlike Waterfall systems, which strictly adhere to contracts, Agile relies heavily on consumer feedback. This approach can even lead to prioritizing customer satisfaction above the specifics of a contract. (Adobe for Business Team, A. for B. T. (n.d.); Laoyan, S. (2025, February 20))

This makes Agile a very responsive method especially in the short term. Agile focuses more on responding quickly to change, rather than following strict plans. The waterfall method in contrast focuses more on adhering to strict planning over iteration and release. This makes Agile produce more potentially buggy end products but increases the speed at which products can be released. (Foley, J., & Alliance, A. (2025, August 1)(Adobe for Business Team, A. for B. T. (n.d.) This can be seen as both an advantage of Agile and also a disadvantage. While planning and execution within the waterfall framework can be time consuming, it is more thorough. This leads to better end results.

However, when a working product is needed in a short amount of time, the off the cuff approaches like Agile accel at producing working products and then supporting them with reactionary iterations. This can be good for platforms like Facebook that rely on user feedback to drive revenue.

Summary

Agile is a reactionary process that prioritises quick release and iteration over planning and functional release. In many circumstances this allows for working products to hit the market and be tweaked as time goes on. For things like Facebook this would be a major plus as it keeps them relevant in an ever changing market. However, this is not the best way to do things for everyone. For example military software needs to be on its final iteration when it goes to war. You wouldn't want the software that controls the nation's nukes to be under documented and buggy.

Reference List:

(Adobe for Business Team, A. for B. T. (n.d.). *Waterfall methodology — project management*. What is the Waterfall methodology? https://business.adobe.com/blog/basics/waterfall

(Atlassian. (n.d.). *Waterfall methodology for project management*. https://www.atlassian.com/agile/project-management/waterfall-methodology

(Foley, J., & Alliance, A. (2025, August 1). W*hat is Agile Software Development?*. Agile Alliance |. https://agilealliance.org/agile101/

(GeeksforGeeks. (2025, July 23). *What is agile methodology?*

https://www.geeksforgeeks.org/software-testing/what-is-agile-methodology/

(Laoyan, S. (2025, February 20). What is agile methodology? (a beginner’s guide) [2025] • asana. Asana. https://asana.com/resources/agile-methodology