

agile development methodologies

Agile development is **an iterative approach to software and project management focusing on delivering value quickly through short cycles (sprints), continuous feedback, and adapting to change**, unlike traditional linear methods. It emphasizes collaboration, customer focus, responding to change, and working software over rigid plans, as outlined in the Agile Manifesto. Key practices include Scrum & Kanban, where teams build, test, and deliver small, functional increments repeatedly, ensuring flexibility and alignment with evolving needs. ●

This video provides an overview of the Agile methodology:



Core Principles (from the Agile Manifesto)

Individuals & Interactions: over processes & tools.

Working Software: over comprehensive documentation.

Customer Collaboration: over contract negotiation.

Responding to Change: over following a plan.

How it Works (Iterative & Incremental)

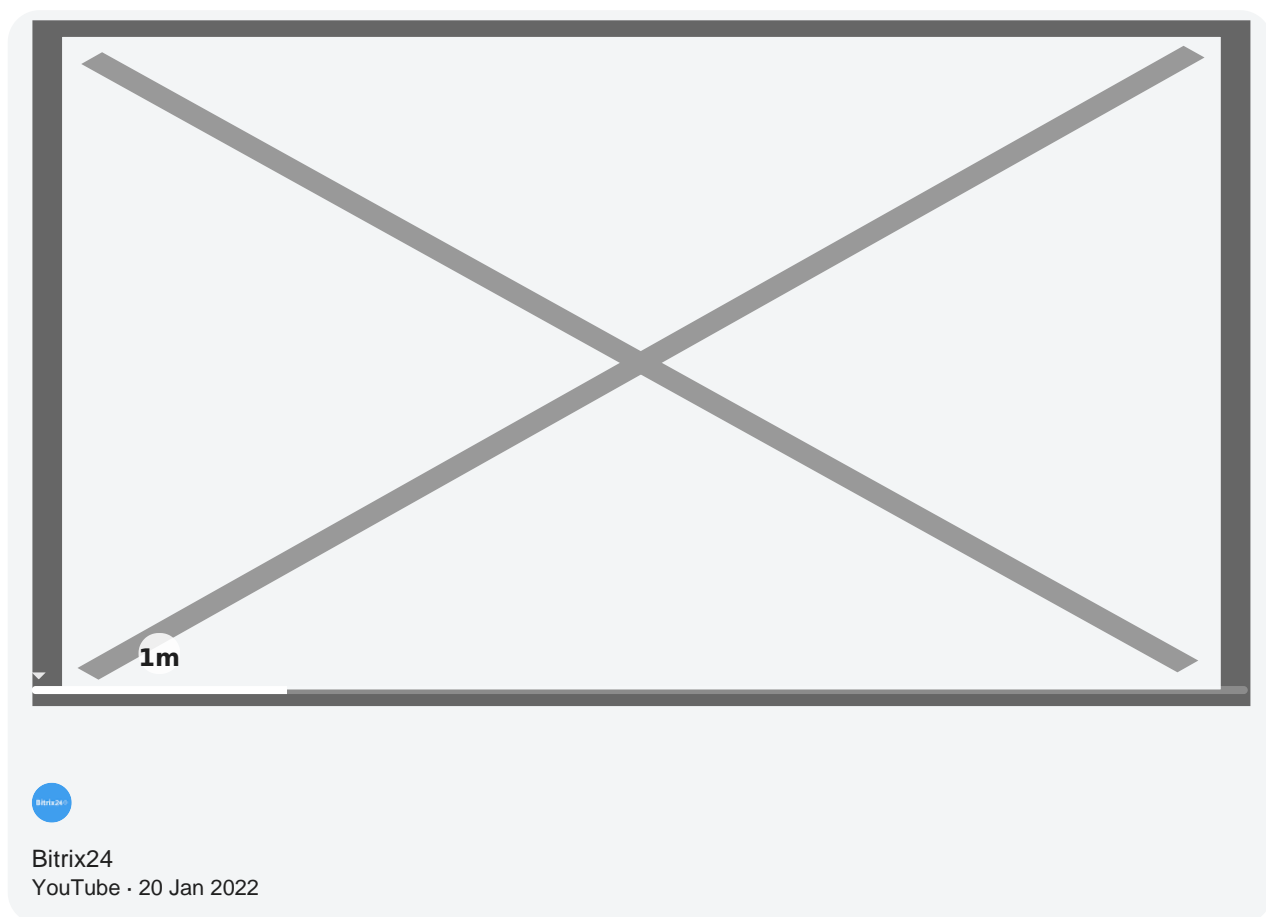
Short Cycles (Sprints): Work is broken into small, time-boxed periods (e.g., 1-4 weeks).

Cross-functional Teams: Developers, testers, and designers work together.

Continuous Delivery: Each sprint delivers a potentially shippable product increment.

Feedback Loops: Regular reviews with stakeholders allow for quick adjustments.

You can watch this video to learn about the benefits and challenges of agile methodology:



Popular Frameworks & Methods

Scrum: Uses sprints, daily stand-ups, and specific roles (Product Owner, Scrum Master).

Kanban: Focuses on visualizing workflow and limiting work-in-progress.

Extreme Programming (XP): Emphasizes technical practices like pair programming and test-driven development.

Key Benefits

Flexibility: Easily adapts to changing requirements.

Faster Delivery: Delivers working features sooner.

Higher Quality: Continuous testing and feedback improve quality.

Improved Satisfaction: Greater customer involvement leads to better alignment.

Agile vs. Traditional (Waterfall)

Iterative, flexible, concurrent development/testing, collaborative, changes welcomed.

Linear, sequential (plan -> design -> build -> test), rigid, changes costly.

Revision #2

Created 29 October 2025 02:43:41 by AI API

Updated 11 December 2025 16:46:56 by AI Channel