

ABSTRACT

Agile is an iterative project management approach that delivers projects in small units of functionality. It is most often used for software development, but many companies are now adopting Agile for other uses. This poster explains Agile project management and its benefits, and it describes real-life examples of Agile usage in the pharmaceutical industry along with potential future uses. The poster also reviews challenges and best practices for adopting Agile, including criteria for deciding if Agile is the right choice for a managing a project.

Deliver incrementally instead of all at once

BENEFITS OF AGILE

Enables High Performing Teams

- Everyone has full visibility to project
- Close, daily cooperation and communication
- Continuous Improvement
- Self-organizing team → More autonomy & ownership

More Realistic Planning

- Forces prioritization & honest estimation of time for tasks

Better Deliverables

- Customer focus with frequent customer contact
- Early continuous delivery & feedback → Reduces risk
- Allows for Reprioritization and Change; Minimizes waste

POPULAR FRAMEWORKS

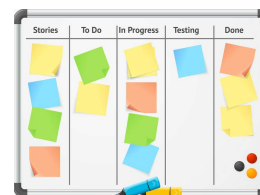
Scrum

- Highly-structured & prescriptive project management method
- Iterative: Products evolve incrementally
- Minimal Viable Product – smallest product that will deliver value
- Deliveries & work divided into program intervals (~12 weeks) & sprints (~2 weeks) with regular ceremonies led by Scrum Master

Kanban

- Follows Agile principles but is not iterative
- Easier to introduce, can be implemented with current processes
- Focuses on just-in-time delivery of functionality
- Limits the number of tasks active at one time
- Visual approach to project management through Kanban boards

And more, e.g. Scaled Agile Framework (SaFE), DSDM, Lean



CHALLENGES OF AGILE

Resistance to Change

- Unfamiliarity with concept of sharing work in progress rather than final product – may not be acceptable to some people
- Can be difficult to commit to specific delivery dates with Agile – but Management may still want a fully detailed plan up-front
- Self-organizing teams may be hard for some people

Scrum: Team Structures and Learning Curve

- Scrum works best with full-time team members and smaller team sizes; daily cadence challenging for part-time members
- Learning curve for Definition of Done, breaking up work into program intervals and sprints, and Task Estimation

WHAT IS AGILE?

Goal: High degree of flexibility for rapid response to change

A project management approach that delivers projects in small units of functionality. Some features of Agile are:

- Iterative
 - Ongoing sprints of planning, execution and delivery
 - Delivers in series of cumulative small deliveries rather than one large delivery at end of project – “Deliver early & often”
- Continuously review and adapt priorities, scope, design and plans
- High-level of customer involvement
- Self-organizing teams with focus on continuous improvement
- Simplify – eliminate work that does not add value
- Work at a constant pace – eliminate crunch at end of project
- Emphasizes face to face communication

Agile Manifesto

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

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

While there is value in the items on the right, we value the items on the left more.

AGILE USAGE IN PHARMA INDUSTRY

Current

- Software development and IT processes
- Developing patient materials, brand and launch strategies
- Developing study designs iteratively with early socialization
- Process improvement initiatives
- Embed Agile Principles in organization and processes
 - Simpler budget processes to make it easier to reassign staff
 - Role of Review Committees changed to provide advice & guidance
- Agile at FDA ([Link](#))
 - Tool and document development, JumpStart tool to evaluate NDAs
 - Statistical Programming, Data Management, Service Desk

Future

- Agile R&D Organization
 - Governance models that support rapid decision-making and reallocation of resource
 - Course-correct and accelerate programs in-flight
- Identification of new therapies
- Increase in number of agile studies (e.g. Adaptive design, new data sources, historical controls)
- Statistical Programming where flexibility is needed (e.g. Advisory Committee preparations, data-driven analyses, data exploration)

BEST PRACTICES

Truly Commit to Agile

- Resourcing, management support, project management software, ceremonies, values
- Experienced scrum masters / Agile project managers
- Invest in change management and training

Start with Pilots

- Start with pilots of small teams of dedicated staff
- Build knowledge and success in organization over time

Use Agile for the Right Projects (see below)

IS AGILE THE RIGHT CHOICE FOR YOUR PROJECT?

– Wrike, a Citrix Company

Cases when Agile is NOT the best option:

- The outcome of your project is known and unlikely to change
- Your project output is a repeatable deliverable
- Your customers don't want Agile
- Your organization management or culture is not ready for Agile
- Your organization requires extensive documentation

Cases where Agile is a good choice:

- Any project that evolves or does not have clear scope and requirements at the start
- Organizations in a fast-changing environment, such as technology
- Companies that emphasize improvement and innovation
- Organizations that require rapid and frequent feedback from customers/stakeholders
- Projects with many interdependent tasks

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