

***The Hybrid Approach:
Combining Agile & Waterfall
Approach for successful
software implementation!***



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AGENDA

- *Introduction*
- *WATERFALL Methodology*
- *AGILE Methodology*
- *THE HYBRID APPROACH*
- *Q&A*

Introduction

“Could a Hybrid Agile-Waterfall Software Implementation approach be the project methodology that your organisation needs to successfully implement software solutions?”

The background of the slide is a photograph of a lush green forest. A waterfall is visible on the left side, cascading into a river. The scene is framed by a large, semi-transparent circular graphic element that is partially cut off by the right edge of the slide. The text is overlaid on the right side of the image.

Waterfall Approach

The waterfall methodology uses a **sequential or linear approach** to software implementations . The project is broken down into a sequence of tasks, with the highest-level grouping referred to as phases.

A true waterfall approach requires phases that are completed in **sequence** and have formal exit criteria, typically a sign-off by the project stakeholders.

Waterfall Example

1. Kickoff Meeting
2. *Business Process Review*
3. *Prepare Functional Requirements Document*
4. *Prepare GAP Analysis*
5. *Develop Solution Blueprint*
6. *Configure System*
7. *Conference Room Pilot*
8. *User Acceptance Testing*
9. *Production Go Live*
10. *Postproduction Support*

Waterfall Advantage

- ❑ Requirements are completed early in the project, enabling the team to define the entire project scope, create a complete schedule, and design the overall application.
- ❑ Resource utilization is optimized because tasks can be split to be worked in parallel to leverage resource skills.
- ❑ The application design is more inclusive because there is a more complete understanding of all the requirements from the beginning of the project.
- ❑ The project status is more easily measured based on a complete schedule and resource plan.

Disadvantages of Waterfall Approach

- ❑ It takes too long before the users see the impact of their decisions.
- ❑ It is difficult for users to make decisions without seeing the software function.
- ❑ It is difficult to get complete business requirements up front in a project, because businesspeople have not really thought through in detail what they need, and business requirements can change during the project.
- ❑ It requires a very detailed breakdown of the tasks and deliverables for the overall application, which may be beyond the project team's capability or experience at the start of the project.
- ❑ The likelihood of projects being late, over budget, and failing to meet expectations rises as the timeframe for an IT project significantly increases, because all phases need to be completed together.

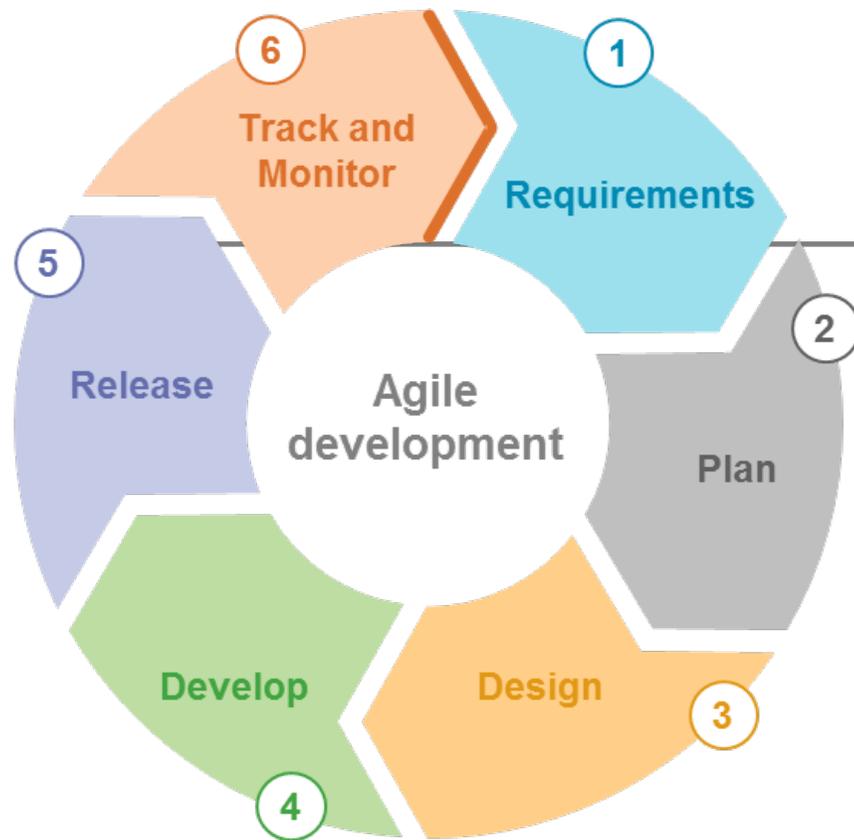


Agile Approach

Agile methodology is a project management framework that breaks projects down into several dynamic phases, commonly known as sprints.

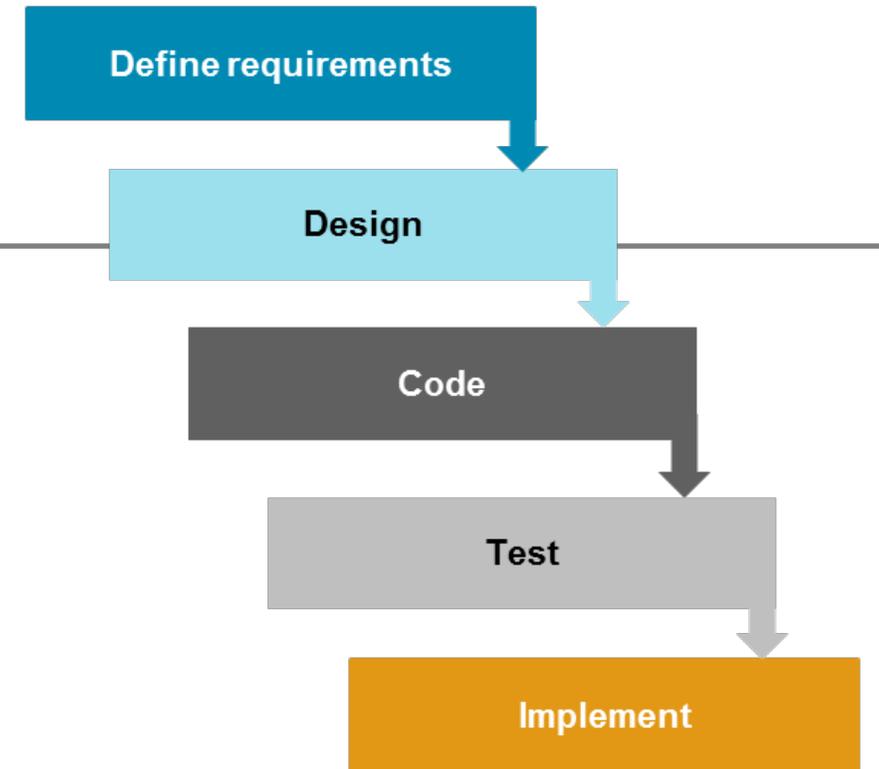
The implementation methodology is interactive and after every sprint, teams reflect and look back to see if there was anything that could be improved so they can adjust their strategy for the next sprint.

Agile



- Continuous cycles
- Small, high-functioning, collaborative teams
- Flexible/continuous evolution
- Customer involvement

Waterfall



- Sequential/linear stages
- Upfront planning and in-depth documentation
- Best for simple, unchanging projects
- Close project manager involvement

Agile Microsoft

"Agile implementation model is associated with an iterative, incremental process for developing Microsoft Dynamics Solutions. This Project Type gives customers greater control over the final solution because they can quickly change the direction of solution development and implementation from one sprint cycle to the next."

– MS Dynamics Sure Step 2010 description.

Agile Example

1. **Solution Backlog:** where the solution feature list is published
2. **Release Backlog:** to identify and prioritise a set of features to be developed during a 30-day sprint, and identify for each feature a time estimation (story point)
3. **Sprint Backlog:** is the breakdown of release backlog according to feature priority and time estimation; it could be 3-days to one month (daily sprint)
4. **User story:** describing the feature business functions, users (roles), and test script (less documentation)
5. **Defect Backlog:** identify and report system bugs
6. **Standup daily meeting:** what we did (status), and what we have today

Agile Advantage

DMR Example

- ❑ Individuals over processes and tools: Agile teams value team collaboration and teamwork over working independently and doing things "by the book".
- ❑ Working software over comprehensive documentation: The software that Agile teams develop should work. Additional work, like documentation, is not as important as developing good software.
- ❑ Customer collaboration over contract negotiation: Customers are extremely important within the Agile methodology. Agile teams allow customers to guide where the software should go. Therefore, customer collaboration is more important than the finer details of contract negotiation.
- ❑ Responding to change over following a plan: One of the major benefits of Agile project management is that it allows teams to be flexible. This framework allows for teams to quickly shift strategies and workflows without derailing an entire project.

Agile Disadvantage

- ❑ Requirements are not fully known at the beginning of the project, thus configuration decisions may need to be changed
- ❑ It can be **difficult to predict efforts** such as cost, time and resources at the beginning of the project
- ❑ It can be **difficult to measure progress** since agile methods deliver in increments
- ❑ It can be **difficult to implement** since people naturally resist changes
- ❑ Teams can get **sidetracked** if they don't see any progress

Hybrid Project Management Approach

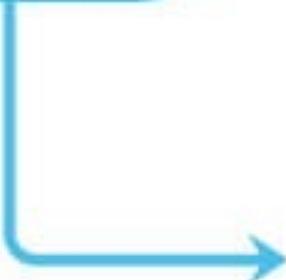
Combining Agile and Waterfall is an alternative to selecting a single approach. The hybrid methodology can take on many variations depending on the needs of the project and the organisation as a whole.

Hybrid Agile-Waterfall can help you improve collaboration, increase the speed-to-market, and slowly introduce the Agile culture in your organisation.

HYBRID

Planning/requirements

WATERFALL



Design

Evaluate

AGILE

Develop

Implement



Hybrid-Waterfall Example

- **Use Waterfall for planning**, requirements definition and design, but switch over to Agile for development, testing, and releasing
- **Incorporate Agile techniques like daily stand-ups**, retros, Kanban boards, or sprints for example in an otherwise traditional development approach. These can help speed up development and achieve visibility on progress even in complex projects
- **Implement new collaborative tools like Microsoft Teams with SharePoint that accommodate both Agile and Waterfall**, and improves transparency, communication, and change management over the full product lifecycle and makes compliance easier

Conclusion

The selection of the **Hybrid Agile-Waterfall** implementation methodology can be a great approach if your organisation needs a more flexible implementation methodology.

Instead of selecting the **Agile or Waterfall** approach, a Hybrid approach means that you are free to build an approach that suits your particular needs for your organisation.

Resources

[Success by Design overview | Microsoft Learn](#)

[Microsoft Dynamics Sure Step Agile Implementation - TechNet Articles - United States \(English\) - TechNet Wiki](#)

[Microsoft Dynamics 365 implementation guide | Microsoft Learn](#)

CONTACT

Stop by booth #74 to chat about Microsoft Dynamics 365 and sign up for a raffle to win Microsoft Surface Go!

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PDF format of this deck will be available at www.projchallenge.com after the event.