Waterfall vs Agile: Choosing the Right Project Approach  
  
When managing a project, two popular approaches come into play – Waterfall and Agile. Based on Chapter 3 of Schwalbe’s Project Management in Information Technology (9th Edition), which covers the project management process groups (initiating, planning, executing, monitoring, and closing), the two methods are applied very differently depending on the needs of the project.  
  
Waterfall Approach

Think of Waterfall as a roadmap, you’ll follow a clear, structured path with predefined steps, and can’t go anywhere else. This method follows the traditional five project management process groups, as each phase must be completed before moving on to the next, which is a very scripted approach. It’s great for projects with clear goals and little room for change.  
  
Why it’s good:  
 It’s well structured, making it very easy to track progress.  
 It’s best suited for projects that have stable requirements.  
 Strong documentation ensures clarity and understanding of everything that needs to be done, making it harder to lose track of what’s going on.  
  
Why it can be tricky:  
Changes are hard to implement after a phase is complete because everything is tied together.  
Testing happens at the end, so mistakes can be costly.  
Lacks flexibility for projects that evolve over time.  
  
Example:  
A construction project follows the Waterfall method. You need a solid plan from the start, redesigning halfway through can be expensive and difficult. That’s why it’s a great fit for architects.  
  
Agile Approach  
  
Agile is really opposite of waterfall, on the other hand, it is all about adaptability. Instead of following a scripted, strict sequence, work is done in smaller cycles called sprints, allowing for frequent updates and stakeholder feedback. This approach is consistent with iterative execution and constant monitoring, making it ideal for projects that require adjustments, making it highly flexible.

According to the Agile Alliance, Agile methodologies are widely used in software development and product management, allowing teams to respond quickly to customer needs and market changes. Unlike Waterfall, Agile thrives on collaboration and continuous improvement.  
  
Why it’s good:  
It’s so flexible and allows for changes at any stage.  
Continuous feedback improves the final product.  
Delivers functional parts of the project faster.

Why it can be tricky:  
Requires frequent communication and collaboration.  
It’s harder to predict exact timelines and costs, as things can change.  
Can become chaotic without proper coordination, and it’s easier to lose track of the story.

Example:  
Developing a mobile app is a great Agile project. User needs can change, so adjusting features along the way ensures a better final product, as you’re directly interacting with feedback.

Final Thoughts and Links  
So, which one fits better for the user? It all depends on the project, it’s all personal, and what’s more convenient for you. Waterfall fits best to the structured, well defined plans, while Agile is really great for evolving projects that require flexibility and adaptation. Understanding the five process groups helps you decide which approach is better to use for you.  
  
Information Technology Project Management (9th edition);   
Agile Alliance/Agile Methodologies. ( <https://www.agilealliance.org/> )