

Waterfall vs Agile

Waterfall and Agile development both are very similar, yet they do have their differences. To start off both development processes have the same seven steps; Requirement Specifications, System Analysis, System design, Implementation, Testing, Deployment, and lastly Maintenance. To start off the development process you need to figure out what the problem is that you are trying to solve and what are the requirements. This is called Requirement Specification. This stage requires close interaction between the users and developers to understand what needs to be solved. Next, we have the System Analysis stage. In this stage you begin to analyze data and understand the systems input and output. In the System design stage is where the system is being designed. Many things are looked into such as how the input and output is obtained. The design will be based around these aspects. Once the system is designed we move to Implementation. This is where the system design is being turned into programs. After the program or programs are written they must be tested in the Testing stage. This stage makes sure the code meets all requirements and works properly. Lastly, we have maintenance stage. In this stage we continuously check up on the system and make sure it is always working at maximum potential. Both Waterfall and Agile development use these steps, but how they use them is what is the major difference.

Waterfall development is more of a straight forward development process. This development process is good for small projects and creates fast delivery. This process follows

the seven development stages in order and only goes back to a stage if there's an issue. Each stage is taken on one at a time and will not move on until it is complete. This makes it easy to measure how long the project will take and makes the planning stage very simple. This development process usually creates a better design since it is taken one step at a time and done in order. In the end of the development everything is documented well and easy to understand.

On the other hand, the Agile development process is all over the place. By this I mean that this development process takes on every stage at the same time. This process is very useful when it comes to large projects. It focuses on primarily on client process and keeps the client constantly involved throughout the whole process. This process is very flexible that allows for easy changes without having to go back to the beginning.

In the end the Waterfall and the Agile development processes are both great. Each process performs better in different situations. Overall the Waterfall model should be used when it comes to a more straight forward project while agile should be used for large projects that may change. Both processes will perform properly if the steps are followed and used. Remember that both processes use the same 7 steps, but just in different order. The steps are what allows the model to work, not the order they are done in.