(SPM)
MS. SHWETA TIWARI
April 20, 2022

SPM
SOFTWARE PROJECT MANAGEMENT

—

By SHWETA TIWARI

Comparison between Agile model and other models

Comparison of characteristics between the Agile model with other models are given below:

Agile model Vs Waterfall model:

Agile model ***Waterfall model***

Agile model 1. Agile model is an incremental delivery process where each incremental delivered part is developed through an iteration after each timebox.

Waterfall model 1. The waterfall model is highly structured and systematically steps through requirements gathering, analysis, SRS document preparation, design, coding and testing in a planned manner. These phases of the Waterfall model follow a sequential order.

Agile model 2. While using an agile model, progress is measured in terms of the developed and delivered functionalities.

Waterfall model 2. In the Waterfall model, progress is generally measured in terms of the number of completed and reviewed artifacts such as requirement specifications, design documents, test plans, code reviews, etc. for which review is complete.

Agile model 3. With the agile model, even if a project is canceled midway, it still leaves the customer with some worthwhile code that might possibly have already been put into live operation.

Waterfall model 3. If a project being developed using the waterfall model is canceled mid-way during development, then there is nothing to show from the abandoned project beyond several documents.

Agile model 4. The Agile model allows you to change the requirements after the development process starts, so it is more flexible.

Waterfall model 4. Waterfall model is rigid, it does not allow to change requirements after the development process starts.

Agile model 5. Customer interaction is very high. After each iteration, an incremental version is deployed to the customer.

Waterfall model 5. Customer interaction is very less. The product is delivered to the customer after the overall development is completed.

Agile model 6. Lack of proper formal documentation leaves ample scope confusion and important decisions taken during various phases can be misinterpreted at later phases.

Waterfall model 6. In the Waterfall model proper documentation is very important, which gives a clear idea what should be done to complete the project and it also serves as an agreement between the customer and development team.

Agile model 7. The Agile team consists of less members (5 to 9 people), but they coordinate and interact with others very frequently.

Waterfall model 7. In the model, a team may consist of more members but interaction between them is limited.

Agile model 8. The Agile model is not suitable for small projects as expenses of developing small projects using it is more compared to other models.

Waterfall model 8. This model is simple to use and understand but not suitable for developing large projects using the Waterfall model.

Agile Model Vs Exploratory programming:

Agile model ***Exploratory programming***

Agile model 1.Agile model is an incremental delivery process where each incremental delivered part is developed through an iteration after each timebox.

Exploratory programming 1.Exploratory programming is an approach of writing programs in an unstructured way.

Agile model 2. Agile teams, however, do follow defined and disciplined processes and carry out systematic requirements gathering, rigorous design.

Exploratory programming 2. Exploratory programming does not follow the rules of software engineering and unstructured coding is done and tested.

Agile model 3. The central idea of the Agile model is to deliver an incremental version to the customer frequently after each iteration.

Exploratory programming 3. Whereas, after coding the software is tested and the found bugs are fixed. This cycle of testing and bug fixing continues till the software works satisfactorily for the customer.

Agile model Vs RAD model:

Agile model ***RAD model***

Agile model 1.The Agile model does not recommend developing prototypes but emphasizes the systematic development of each incremental feature at the end of each iteration.

RAD model 1.The central theme of RAD is based on designing quick and dirty prototypes, which are then refined into production quality code.

Agile model 2.Agile projects logically break down the solution into features that are incrementally developed and delivered.

RAD model 2.The developers using the RAD model focus on developing all the features of an application by first doing it badly and then successively improving the code over time.

Agile model 3. The Agile team only demonstrates completed work to the customer after each iteration.

RAD model 3. Whereas RAD teams demonstrate to customers screen mockups and prototypes, that may be based on simplifications such as table lookup rather than actual computations.

Agile model 4. The Agile model is not suitable for small projects as it is difficult to divide the project into small parts that can be incrementally developed.

RAD model 4. When the company has not developed an almost similar type of project, then it is hard to use the RAD model as it is unable to reuse the existing code.

Agile model Vs Incremental development model:

Agile model ***Incremental development model***

Agile model 1.Agile model is an incremental delivery process where each incremental delivered part is developed through an iteration after each time box. The main principle of the Agile model is to achieve agility by removing unnecessary activities that waste time and effort.

Incremental development model 1.The requirements of the software are divided into several modules that can be incrementally developed and delivered. The core features are developed first and the whole software is developed by adding new features in successive versions.

Agile model 2. In the Agile model, the end date for an iteration is fixed, it cannot be changed. The development team may have to decide to reduce the delivered functionality to complete that iteration on time.

Incremental development model 2. In the Incremental development model, there is no fixed time to complete the next iteration.

Agile model Vs Spiral model:

Agile model ***Spiral model***

Agile model 1.The main principle of the Agile model is to achieve agility by removing unnecessary activities that waste time and effort.

Spiral model 1.The main principle of the Spiral model is risk handling.

Agile model 2. The Agile model focuses on the delivery of an increment to the customer after each Time-box, so customer interaction is more frequent.

Spiral model 2.The Spiral model mainly deals with various kinds of unanticipated risks but customer interaction is less.

Agile model 3. The Agile model is suitable for large projects that are easy to divide into small parts that can be easily developed incrementally over each iteration.

Spiral model 3. The Spiral model is suitable for those projects that are prone to various kinds of risks that are difficult to anticipate at the beginning of the project.

Agile model 4. The Agile model does not rely on documentation.

Spiral model 4. Proper documentation is required for the Spiral model.