Agile software development

Technology, Information Technology

number Agile software development With the increase and dynamics of the needs and wants s, the softwaredevelopers have been forced to rise up to the occasion and get involved in software development. There has been a rise in the competition and timely delivery and efficiency has become an issue in software development. Most organizations currently use the Agile and Waterfall software in their operations. There have been mixed reactions as concerns the superiority of the two software methodologies. However, both have their own pros and cons and have different features that are used under different circumstances.

Features of Agile

Agile software has a lot of flexibility as opposed to the rigid waterfall. The main hallmark of the agile system is its adaptability and agility. The iterative nature of agile makes it to be able to work without following a given pattern. A lot of iterations are involved including testing, coding and designing. Agile is different from waterfall in the sense that unlike the waterfall system which cannot allow for any changes to be made once the design is already completed, agile has no rigidity and allows for changes to be made and improvements to be done even at the last stages of software development. Teams developing software through the use of the Agile process are usually cross functional in their nature. There have been always an expertise sharing and close cooperation unlike the case with waterfall. (Highsmith, 2002)

Features of Waterfall

The waterfall model happens in a manner that is sequential, moving from one stage to the other. This software development undergoes various stages including identifying the specification before conception, then analyzing,

working on the designs, coding and testing, debugging then installing and finally, maintaining in the end. The developing team moves to the next stage only after the previous stage is completed. The engineers working on the software do spend much time at every stage and there is no chance of debugging once the software is made ready for the testing process. The Waterfall methodology considers documentation as an integral part of the software development.

Advantages of Agile

The Agile methodology has a team that is adaptive and that can easily respond and adjust to the changes in the requirements. Effort and time must not be invested on by the team thus reducing the chances of being irrelevant in terms of customers' needs and wants. The team has a face to face communication with the customers hence having quality products at the required time.

Disadvantages of Agile Methodology

It is not always difficult to assess and establish the required effort at the beginning of the process of developing the software especially in cases involving software deliverables. The methodology lacks emphasis on the documentation and designing which is necessary. The Agile process can often be easily taken off track in the event that the consumer representative does not clearly bring out the requirements of the consumers

Difference between Agile methodology and the Waterfall methodology

Agile methodology is more efficient than the Waterfall methodology as it is more adaptable to the issues in the real world. The Agile is also efficient in that lesser time is used in the products and there can be some changes

made on the last minute. Agile is popularly used as compared to Waterfall which is used in limited circumstances only. Waterfall is best suited methodology used in the development of programs that are needed to be stable and that have just a little makeover to be done on them. In terms of management, Managing Waterfall is easier than Agile and the costs that are going to be involved in the development of programs can easily be known beforehand.

Work cited

Highsmith, J. Agile Software Development Ecosystems. Boston: Addison-Wesley Professional, 2002.