

The Introduction of the Waterfall Model

ASM Muntaheen*

Department of ICT-GIS Division, Institute of Water Modelling (IWM), Dhaka, Bangladesh

*Correspondence to: ASM Muntaheen, Department of ICT-GIS Division, Institute of Water Modelling (IWM), Dhaka, Bangladesh, India, E-mail: muntaheen.mist@gmail.com

Received: June 08, 2021; Accepted: June 22, 2021; Published: June 29, 2021

Citation: Muntaheen ASM (2021) The Introduction of the Waterfall Model. Am J Comput Sci Eng Surv Vol. 9 No. 4:e010. Copyright: © Muntaheen ASM. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

EDITORIAL

The waterfall model divides project activities into linear sequential stages, each of which is dependent on the previous phase's deliverables and corresponds to a task specialisation. This method is common in some areas of engineering design. It's one of the least iterative and adaptable methodologies in software development. During the phases of conception, commencement, analysis, design, construction, testing, deployment, and maintenance, progress is generally in one direction.

The waterfall development approach emerged from the manufacturing and construction industries, where highly organised physical environments made design changes prohibitively expensive much earlier in the development process. There were no recognised alternatives for knowledge-based creative work when it was originally embraced for software development.

Herbert D. Benington gave the first known presentation detailing the usage of such phases in software engineering on June 29, 1956, at the Symposium on Advanced Programming Methods for Digital Computers[citation needed]. The topic of this lecture was software development for SAGE. The paper was reissued in 1983 with a prologue by Benington, who explained that the phases were intentional. The procedure was not carried out in a pure top-down approach, but rather relied on a prototype, and was organised according to task specialisation. The first formal detailed depiction of the mechanism afterwards known as the "waterfall model" is included in the paper, despite the fact that the phrase "waterfall" is not used is often cited as a 1970 article by Winston W. Royce. However he also felt it had major flaws stemming from the fact that testing only happened at the end of the process, which he described as being "risky and failure is a given." The rest of his paper outlined five steps that

he believed were required to "remove the majority of the development risks" connected with the waterfall approach as it stood.

Royce's five additional phases (which included creating detailed documentation at various stages of development) were never widely adopted, but his depiction of a broken method provided the basis for depicting a "waterfall" approach.

Bell and Thayer's 1976 paper may have been the first to use the word "waterfall."

The US Department of Defense incorporated this method in its DOD-STD-2167A rules for dealing with software development contractors in 1985, which stated that "the contractor shall implement a software development cycle that comprises the following six phases: Preliminary Design, Detailed Design, Coding and Unit Testing, Integration, and Testing"

In the future, we'd like to publish more high-quality articles about recent advances and new technologies that demonstrate good computer science and engineering processes. This will be extremely beneficial in the development of future creative and new technology.

I would like to thank editorial board members, authors, reviewers and readers who provided us continuous support and made American journal of computer science and engineering survey became very successful with good number of quality articles and reached good heights with this continuous support. Thanks to all the reviewers and editors whose cooperation and hard work made this possible? IPACSES publishes latest updates related to the hot topics and trending topics, high-quality and original research papers alongside relevant and insightful reviews. This journal is always challenging with the recent updates in computer science and engineering.