A Comparative Study of Agile and Waterfall Software Development Methodologies

Justin Joseph John[1] and Shailesh Satish Sharma[2]

Student, Master in Computer Application[1]

Professor, Master in Computer Application[2]

Institute of Distance and Open Learning, Mumbai, Maharashtra, India

Abstract: *In earlier software development all processes were completed and implemented but now this is not a scenario. In the modern era, changes are frequent to any software product or module that is in a development phase, due to market competition's priority of requirement changes Because the traditional process models are incompatible with these changes, agile methodology is used instead.. The earlier waterfall model was convenient because of less requirement of features and the emergency of the application in a short period. This Paper Discusses the Comparative Analysis of the waterfall model and agile methodologies while agile methodologies are taking over, even though the waterfall model is older and time-consuming it is still used in many sectors The paper will help other software development process models. The agile method plays an important role in the areas of software project management, software schedule management, etc. The main aim of agile is Customer satisfaction as well as faster development with a low defect rate. This reflects the comparison of the agile processes with the waterfall model software development life cycle model. Agile processes are always beneficial; they have their own set of downsides. The agile method promotes continuous iteration of development and testing throughout the software.*

Keywords: Agile Methodology, Software development lifecycle, Extreme programming, Scrum, waterfall model

REFERENCES

[1]. Tobin J Lehman, AkhileshSharma , "Software Development as a service: Agile Experiences", in annual SRII Global Conference(2011).

[2]. Ahmed, S. Ahmad, Dr. N Ehsan, E. Mirza, S.Z. Sarwar,"Agile Software Development: Impact on Productivity and Quality", in the Proceedings of IEEEICMIT.(2010).

[3]. B.Boehm and R.Turner, "Balancing Agility and Discipline: A Guide for the Perplexed, Addison, Wesley,2003.

[4]. Eason,OrianaKarina,"InformationSystemsDevelopmentMethodologiesTransitions: An Analysis of Waterfall to Agile Methodology" (2016).

[5]. Ahmed Lawal, Richard Chukwu Ogbu, "The Comparative Analysis of Agile and WaterFall Software Development Methodology"

[6]. Agile Methodologies: Working Mechanism with Pros and Cons, Rajiv Kumar, GIAN JYOTI E-JOURNAL, Volume 4, Issue 2 (Apr-Jun 2014)

[7]. Advantages and Disadvantages of Waterfall Model, https://vittana.org/15-advantages-and-disadvantages-of-a-waterfall-model

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/IJARSCT-15207

ISSN
2581-9429
IJARSCT

54