

Abstract

In recent years, Scrum has grown in popularity and is now one of the project development approaches widely used by organizations around the world. Startup XYZ has been implementing Scrum in its project development since 2021. However, until now, the Scrum implementation process is still experiencing many obstacles. Based on identification through a fishbone diagram, these problems stem from the application of Scrum which has not been maximized in software development at Startup XYZ. The purpose of this research is to measure the maturity level of Scrum implementation in software development at Startup XYZ using the Scrum Maturity Model (SMM). SMM focuses on evaluating and providing direction for software development that implements Scrum. Then the Key Process Area (KPA) Rating is used to define achievements in each process area, which is adapted from the Agile Maturity Model (AMM). The measurement results show that the Scrum maturity level at Startup XYZ is still at level 1 (Initial). Based on the measurement results, improvement recommendations and tools in the form of prototypes are given to actualize the improvement recommendations visually. The improvement recommendations provided are compiled based on the answers to the SMM questionnaire and refer to the Scrum Guide 2020, SBOK Guide v3, and Essential Scrum, with a focus on increasing level 2 and level 3 according to the expectations of Startup XYZ.

Keywords: Scrum, Scrum Maturity Model (SMM), Agile Maturity Model (AMM), Maturity Level Measurement.