Improving the governance of software maintenance process for agile software development team

ABSTRACT

Software maintenance is one of the most debated phases in software development process for so many years. Having reputed as the most expensive phase of software development life cycle (SDLC), it utilizes the maximum share of the overall project costs as well as time. Agile software development provides opportunities to assess the direction of a project throughout the development lifecycle. However, it does not ideally map with the existing software maintenance process. One of the highlighted issues is the difficulty for searching of information as well as lack of knowledge to solve the maintenance problems within certain time frame. Thus, the main objective of this study is to improve the governance of software maintenance process in an Agile development team. In doing so, a tool named Axita is developed to assist the software maintenance team for storing of information in central data repository and managing projects in more efficient and timely manner. Based on the literature review as well as mapping between the agile software development and the existing ISO software maintenance process, we also proposed six best practices to better govern the software maintenance process in an Agile development team, to overcome the difficulty of information finding and reduce the time spent to solve the maintenance issues. . We believe that our study and findings complement the efforts that have been put forth in improving the way we manage software maintenance thus enhance the efficiency of the software development process.

Keyword : Agile; Best practices; Software maintenance