

Systematic literature review on effort estimation for open sources (OSS) web application development

ABSTRACT

The development of Web applications has a crucial role as most organizations have their own corporate Web applications to meet the needs of their respective businesses. Different needs create different complexities which represent a new challenge to Web application development. In order to ensure the timely delivery of a project, software providers offering this service choose to use Open Sources (OSS) as an alternative. Since OSS consist of an existing framework that can be implemented directly into the application, how far does this affect the complexity of the effort estimation? A number of research papers have outlined the efforts made to refine the complexity of this field. However, to our best knowledge a systematic overview of the research done on Web application development that involves OSS usage does not appear to exist. Hence, the aim of this paper is to conduct a systematic literature review (SLR) of OSS Web application development. For this purpose, 34 papers from a total of 67 papers were identified and studied. The findings of this study indicate that (a) no research has been carried out on the field mentioned; (b) there is no early effort estimation model for Web projects that involve the usage of OSS. Therefore, this work provides an overview of the field besides identifying future research possibilities.

Keyword: Effort estimation; Open sources; Systematic literature review; Web application development