A framework of collaborative knowledge management system in open source software development environment.

ABSTRACT

The global economy crisis reveals the advantages of Open Source Software (OSS). Software developers benefit not only from reduced cost of acquisition, but also access to source code and components. In this aspect, knowledge sharing among developers are immensely important in all facets of System Development Life Cycle (SDLC). Feller and Fitzgerald (2000) raised the critical questions on what life-cycle underpins the OSS model and what is the best methodology to support the OSS as well as what toolkit support OSS methodology. This paper shall discuss the formulation of Knowledge Management System (KMS) framework for sharing knowledge in OSS using SDLC from the planning phase until the maintenance phase. An initial fact finding survey was conducted on selected OSS developers in Malaysia to analyze the current usage and acceptance of OSS. The results are quite unexpected, with many OSS developers are still not fully using OSS tools in SDLC stages. The proposed KMS model is envisaged to allow OSS Community-of-Practice to share the OSS knowledge for the whole SDLC.

Keyword: Open source software; Knowledge; Knowledge management; Community of practice; KMS framework.