An ontological model of experience-based knowledge management in agile software development environment

ABSTRACT

Agile software development (ASD) involves more in discussion and communication between team members compared to documentation; it is difficult for team members to share knowledge among them. In this matter, knowledge management (KM) plays critical role in managing and capturing the knowledge especially experience-based knowledge. This research main purpose is to create ontology to represent the knowledge that has been stored in knowledge repository after capturing the experience knowledge from the development team in ASD. This ontology model will help by describing a relationship that will later on help in sharing the experience knowledge easily among Community of Practice (CoP). A literature review of the common things in the ASD been conducted, we then creating ontology model by using a tools called Protégé. This ontology called as Experience-Based Knowledge Management (EBKM) Ontology Model. The model is deployed to apply to the reality as a prototype to demonstrate its real value.

Keyword: Agile software development; Knowledge management; Ontology; Experience-based factory; Community of practice