Developing knowledge factory system as a best practice platform in software process environment

ABSTRACT

Knowledge' is one of the main outcomes systematic approaches of software engineering. It is considered as a crucial resource of each organization and, therefore, needs to be managed carefully especially for the software development process and the roles involved in each phase. The effectiveness application of software engineering relies on experiences, and organizations need to capitalize on their experiences by capturing and reusing them. In all approaches of experience reuse, repositories play a central role in enhancing the knowledge in experience transfer of process knowledge between projects. Like in a factory beside the production there are the people who produce. Experiences should not be stored on a dusty shelf, but engineered into best practices and processes that could be guidance to all roles in the software project especially for the developer. This paper presents the approach to the implementation of the project knowledge based on software development life cycle.It also describe on how the knowledge factory solution can be used as a decision support system for software project managers in day-to-day development activities. The paper concludes with an evaluation of our approach to date and a description of future research directions.