

## Architectural design of experience based factory model for software development process in cloud computing: integration with workflow and multi-agent system

### ABSTRACT

A model which is based on experience factory approach has been proposed earlier, called EBF-SD, to overcome the limitations of experience management in software development domain. An application prototype, which is then called SDeX, is developed based on the proposed model. The study on correlation analysis indicates that automation do have positive relationship with other components: knowledge management, cloud, collaboration and portal. This paper further discusses the high level prototype development with the emphasis on the architectural design. Automation features are incorporated in the design in which workflow system and intelligent agents are integrated, and the facilitation of cloud environment is empowered to further support the automation.

**Keyword:** Architectural design; Knowledge management; Experience factory; Workflow; Multi-agent system; Cloud automation