Knowledge mapping process model for risk mitigation in software management

ABSTRACT

As software organizations try to mitigate operational and technical risk that occurs when using software, there is need to develop a knowledge intensive system to assist team members in mitigating both operational and technical risk. Knowledge mapping in risk mitigation context is in its infancy and has the potential to address both operational and technical risk faced by software organizations. However, as the amount and depth of organizational knowledge increases, it poses some challenges to software organizations. The key challenges for knowledge intensive organizations are how to identify, assimilate, disseminate, and apply these risk knowledge; particularly between different team members in same software development project. Thus this paper proposes a knowledge mapping process model to assist in mitigating risk (operational and technical) that occurs in software organizations. Knowledge mapping is the field within Knowledge Management (KM) that aims to optimize the efficient and effective use of the organization's knowledge. The mapping process model can support software management teams in measuring and treating risk, thus aiding decision making in software management. Data was collected using semistructured interview through case study. The interview transcripts were coded and categorized using Nvivo software.

Keyword: Knowledge map; Knowledge mapping technique; Risk mitigation; Software management; Nvivo