A risk assessment model for collaborative support in software management

ABSTRACT

Risk assessment in software management involved strategies to estimate and control risk ensuring proper function of the software process without system failure. Software management related to risk assessment has attracted less interest in academic literature. Existing risk assessment models in software process cannot reduce the time involved in carrying out risk assessment; they also don't provide collaborative support among software practitioners in assessing risk and they cannot promote interactions between software practitioners who are distributed across different geographical regions. Thus this paper addresses this limitation and the gap in the current literature and proposed a risk assessment model using knowledge codification and multi software agents. The proposed model can assist practitioners in assessing risk by reducing time, estimating the risk and provides collaborative support within practitioners for managing software across different regions. Qualitative data was collected using semi-structured interview in 2 Malaysian organisations, with 3 respondents based on purposely sampling to identify how the practitioners assessing risk in their respective organisations. Results show that risks in software process are not adequately assessed based on inadequate collaborative support among practitioners and longer time taken to assess the risk.

Keyword: Collaborative support; Risk; Risk assessment; Software management