The Role of Knowledge Management in Global Software Engineering

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Abstract : Knowledge management is essential ingredient of successful coordination in globally distributed software engineering. Various frameworks, KMSs, and tools have been proposed to foster coordination and communication between virtual teams but practical implementation of these solutions has not been found. Organizations have to face challenges to implement knowledge management system. For this purpose at first, a literature review is arranged to investigate about challenges that restrict organizations to implement KMS and then by taking in account these challenges a problem of need of integrated solution in the form of standardized KMS that can easily store tacit and explicit knowledge, has traced down to facilitate coordination and collaboration among virtual teams. Literature review has been already shown that knowledge is a complex perception with profound meanings, and one of the most important resources that contributes to the competitive advantage of an organization. In order to meet the different challenges caused by not properly managing knowledge related to projects among virtual teams in GSE, we suggest making use of the cloud computing model. In this research a distributed architecture to support KM storage is proposed called conceptual framework of KM as a service in cloud. Framework presented is enhanced and conceptual framework of KM is embedded into that framework to store projects related knowledge for future use.
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