A Pilot Study on Enhancing the Application of Knowledge Management Systems
Using Semantic Segmentation

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Abstract

Owing to extensive knowledge management activities are promoted in various enterprises. How to enhance the application of knowledge management systems (KMS) becomes a critical issue. One of the enhanced applications of KMS is the SOS system, which aims at sharing knowledge for solving emerging problems. While it takes time for experienced employees to share their knowledge via the SOS system, it is advantageous to introduce an Automatic Problem Answering (APA) mechanism. When an emerging problem is issued, the APA mechanism will find actively suitable knowledge from the Intellectual Asset Repository (IAR), which consists of various sources of knowledge. In this paper, a semantic segmentation method is proposed and is employed in building a semantic segmentation module (SSM) in APA. SSM will automatically extract the knowledge corpuses embedded in documents. The extracted knowledge corpuses will be reused in APA to solve emergent problems and thus the application of KMS is enhanced.

Keyword: Knowledge management, Text mining, Semantic segmentation