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Knowledge Management through Knowledge Engineering

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Abstract

Knowledge management facilitates the capture, storage, and dissemination of knowledge using information technology. As knowledge emerges as the primary competitive advantage for firms, knowledge management has received a lot of attention and is being used in an increasingly wide variety of application domains. In this paper, we propose a knowledge engineering approach (KMKE) to managing knowledge. In KMKE, knowledge management activities are integrated in a systematic framework consisting of knowledge modeling, knowledge verification, knowledge storage, and knowledge querying. First, a knowledge modeling approach is used to organizing and expressing variant types of knowledge in a unified knowledge representation. Second, a verification mechanism is used to verify knowledge models based on the formal semantics of the knowledge representation. Third, knowledge models can be classified and stored in a hierarchical ontology system. Finally, a knowledge query language is designed to enhance the dissemination of knowledge.

Key words : Knowledge management; Knowledge engineering;

Conceptual graphs