Ontology Driven Approach for Effective Decision Making

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Abstract

Decision-making is the task of every top management in an organization. Decision maker needs relevant and meaningful information to help in taking decisions. Meaningful information retrieval is a challenge for effective decision-making. Due to lack of domain knowledge, meaningful information remains hidden in the database itself. Decisions made out of irrelevant and meaningless information sometimes lead to irreparable damage to organization and its reputation. To retrieve relevant information it is necessary to have background knowledge about the domain. Background knowledge in the form of ontology is an important source of information. Domain ontology used as a source of domain knowledge which retrieves all the meaningful information from the database to help in taking decision. In proposed approach, ontology is used as domain knowledge. Use of ontology improves the relevancy and meaningfulness of the results in order to get more meaningful information for effective decision making. Experimental evaluation shows that, results obtained by using proposed approach are more precise and relevant than existing non-ontological approach.
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References


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Keywords

Ontology, Decision-making, Future Prediction, Domain knowledge, Meaningful information, Background knowledge, Information retrieval, Business intelligence.