

Semantic knowledge retrieval KMS components-validating the questionnaire items

ABSTRACT

Knowledge management system (KMS) provides access to stored knowledge through the utilization of information and/or knowledge retrieval technologies. This enables knowledge workers to have necessary information for performing their knowledge intensive tasks effectively. To model the requirements for a semantic-based knowledge retrieval (KR) of such systems, a literature review of KMS (including the ontology-based) and semantic knowledge retrieval frameworks is conducted. By so doing, tools, technologies, and knowledge components necessary for a semantic knowledge retrieval KMS are identified and modeled as proposed. Questionnaire survey is used to verify the model components. Pilot survey is initially administered to validate the questionnaire items and to ensure that the item constructs are acceptable for determining the important components of the model. Rasch measurement is used for analysis due to the ordinal nature and collected small sample of the Likert-scale data. Questions perceived to be misleading are revised and some confusing or rather controversial questions are excluded from the questionnaire.

Keyword: Knowledge management systems; Semantic technologies; Knowledge retrieval components; Rasch analysis; Semantic search