An analysis of ontology engineering methodologies : a literature review.

ABSTRACT

It is now widely accepted that ontologies play a critical role in achieving the goal of machine understandable web, also known as semantic web. In order to develop ontologies, several methodologies have been proposed during the last two decades. Despite the fact, that quite a number of ontology engineering methodologies have been proposed, still the field lacks widely accepted and mature methodologies. Most methodologies lack sufficient details of techniques and activities employed in them. However, some methodologies provide sufficient details including METHONTOLOGY. This article discusses and reports a critical analysis and comparison of these methodologies.The analysis is performed based on a criterion, derived from related literature, trends and needs which evolved over the years. The results of the analysis showed that there is no completely mature methodology.Therefore, this research may act as a preliminary guide to come with a state of art ontology engineering methodology, bridging up the existing gaps and shortfalls.

Keyword: Knowledge engineering; Ontology engineering; Ontologies; Semantic web