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Do Ontologies Dream of Concepts? – Or: Blank Spots in Ontology Engineering

In the early days of research on ontologies a frequently asked question was "What is ontology?" Nowadays many websites provide an answer to the question. Methodologies as well as technologies to build and maintain ontologies, usually referred to as semantic web technologies, have matured. Potential users, let's think of them as customers, have a basic understanding and often appreciate potential benefits … only to come up with more tricky questions. E.g., manager start with "How much does it cost (to develop ontologies)?" followed by "How can the costs be reduced?" Technical staff continues with "How do I evaluate the created ontology?" Until recently, no good answers were in place, indicating blank spots to be explored to push further the adoption of semantic web technologies, especially by industry.

This presentation includes for completeness (and for fun) an answer to the very first question. Giving answers to the latter ones constitute the main building blocks of the presentation, spanning from economical to technical aspects. In the economic part major cost drivers for the development of ontologies are revealed and combined in a framework which allows for prediction of costs. Results and findings from field studies to validate and apply the framework in real projects are shown, such as that advance in the area of ontology evaluation, an often neglected area, may result in significant cost reductions. As revealed in the technical part of the presentation, applying the most well-known ontology evaluation methodology, OntoClean, is rather difficult and costly. It requires many different skills at the same time (such as deep philosophical understanding) and involves high manual efforts. To leverage ontology evaluation for a wider audience and to make ontology evaluation more cost effective, an approach for automatizing OntoClean is shown which is based on the employment of lexico-syntactic patterns on the Web.

How the subtitle and the abstracts fit to the main title will be revealed only during the presentation.

About the presenter:

York Sure is an assistant professor at the Institute AIFB of the University of Karlsruhe in Germany and currently visiting researcher at Stanford University. His research interests mainly include semantic technologies and knowledge management. Recently York has been program chair of the European Semantic Web Conference (ESWC) in 2006. He has been awarded with the IBM UIMA Innovation Award 2006. You can find out more about York at http://www.york-sure.de/.