Abstract:
This paper presents an approach for combining two actual trends in the engineering domain: ontology-based knowledge management and structural complexity management. A focussed engineering system can be analysed and possibilities for improvements can be deduced with low effort by applying structure based algorithms on already existing ontologies. An overview of the current use of ontologies in the engineering domain is given for showing the various options for this application of structural complexity management. Necessary interfaces between ontology-based knowledge management and matrix-based structural complexity management are deduced by comparing both approaches considering data representation and analysis capabilities. The proposed approach is applied and discussed by the example of analysing an ontology originally developed for handling technical solution knowledge in the field of automation industry.
Structure computation

Kongress-/Buchtitel: KEOD 2011 - International Conference on Knowledge Engineering and Ontology Development

Kongress/Zusatzinformationen: 25. - 30.10.2011

Jahr: 2011

Semester (für SAP-Datenerfassung): WS 11-12

Occurences:

· Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung (Prof. Volk komm.) > Konferenzbeiträge

· Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung, Konstruktionssystematik und Leichtbau (Prof. Zimmermann) > Konferenzbeiträge

entries: