

AN ONTOLOGY-BASED APPROACH FOR CONCEPTUAL PRODUCT DEVELOPMENT

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Abstract:

The paper presents an extension of the product development ontology in order to identify a practical solution for correlating the product structure, and its particularly components, with complementary related factors. These factors target the market, furniture suppliers, manufacturing solutions, delivery terms, price or quality in order to take optimal decisions during the conceptual or detailed design process. As opposed to other approaches, the proposed method uses on one hand limitations so as to determine the correct decision-making act even for the unskilled people and on the other hand some added knowledge embedded in the ontology.

Keywords: ontology engineering, conceptual modelling, product development, knowledge representation, distributed design