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ABSTRACT OF THE LICENTIATE THESIS

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Product configuration is an important process for industrial companies whose products are adapted to the needs of each customer. Product configuration is a process that benefits greatly from the support of computerised systems. Management of product knowledge, however, in the implemented configuration systems has been a major problem, and still is. One of the main reasons for the difficulties is that configuration knowledge becomes too complex for product experts to understand. Therefore, appropriate means are needed for modelling configurable products, i.e., products that have a large number of variants. This includes modelling methods for representing the variety in products as well as the means for modelling and managing the evolution of configuration knowledge and its relation to the evolution of delivered products. The problem area is analysed conceptually as well as by looking at the various approaches for modelling product variety and configuration knowledge. Thereafter, a classless data model for representing configurable products is defined. Finally, the evolutionary aspects of configuration knowledge and delivered products are investigated as they occur in the industry and with respect to the proposed data model.

Keywords: Product data management, product model, configuration