

# CONNECTING CONSTRUCTION NOTIFICATIONS AND BILLS OF MATERIALS – AN INTEGRATED APPROACH TO SUPPORT LOGISTIC PROCESSES FOR INDIVIDUAL AND STANDARD PARTS

OESTREICH, E. & TEICH, T.

**Abstract:** *The success of the implementation of a mass customization strategy in practice depends on the ability of a company to cope with product complexity in an effective way. This research is focused on product configuration of complex individual packages, namely the automotive industry. In the centre of interest are packages that are - in contrast to conventional optional equipment – specified by a high number of features, which can be modified by a customer according to their personal needs. For these kind of packages it is often necessary to draw up some creative documents – so called construction notifications – describing the ordered components in a very detailed manner. By the use of this strategy it is possible to reduce complexity of the product model noticeably. The current complexity is almost completely handled by a flexible configuration model. But in many situations there is also an additional demand for standard parts, needed for the final assembly of an individual component. In order to support the procurement processes for such parts, it is necessary to transfer a construction notification directly into a bill of materials. Therefore this paper presents the basic requirements, as well as, an appropriate algorithm to accomplish the transformation task.*

**Key words:** *product configuration, Mass Customization, bills of materials, generic bills of materials, automotive industry, individualization, customization, complexity*



**Authors' data:** Dipl. Wirtschaftsinformatiker **Oestreich**, E[rik]; Prof. Dr. **Teich**, T[tobias], University of Applied Sciences Zwickau, D-08496 Neumark, Am Schafweg 24, Germany, erik.oestreich@web.de, tobias.teich@fh-zwickau.de

**This Publication has to be referred as:** Oestreich, E. & Teich, T. (2007). Connecting construction notifications and bills of materials – An integrated approach to support logistic processes for individual and standard parts, Chapter 41 in DAAAM International Scientific Book 2007, B. Katalinic (Ed.), Published by DAAAM International, ISBN 3-901509-60-7, ISSN 1726-9687, Vienna, Austria  
DOI: 10.2507/daaam.scibook.2007.41