
Titel des Beitrags: An Architecture Framework for Multi-Product Portfolio Management in the Commercial Vehicle Industry

Abstract: In the field of commercial vehicle manufacturing, the functionality and complexity of products rises steadily while innovation cycles become considerably shorter. In addition, customer orientation causes rising external complexity of product portfolios. Without the moderating and managing role of an architecture department within a corporation these diversified markets drive a multi-product development towards increased inner complexity which cannot be handled efficiently anymore. In this paper, we address the role, necessary tasks and methodologies of a product architecture department at a commercial vehicle manufacturer. A so called Architecture Framework is presented that helps to cope with the organizational complexity in the field of product development by structuring work processes and assigned tools. For that, we reflected the requirements of a commercial vehicle manufacturer towards an Architecture Framework to existing solutions in literature. The advantages of each concept were consolidated. The suggested framework was prototypically tested in an industrial environment.

Stichworte: Product Architecture Design; Design Process; Architecture