Supporting the cross-disciplinary development of product-service systems through model transformations

During the development of product-service systems (PSS), various artifacts are modeled by the different involved disciplines, e.g. mechanics, electrics, electronics, software and services. Each of these artifacts represents different aspects of the PSS as a whole. In order to reuse the respective information that are contained in each artifact but which are represented using different ways of modeling, transformations are needed.

In this paper we present a conceptual methodology how the relevant PSS elements and their attributes can be transformed from one specific language to another, in order to facilitate the cross-disciplinary use of model-based information during the development process of mechatronic PSS.

**Stichworte:**
mechatronics; conceptual methodology; cross-disciplinary development process; cross-disciplinary use; mechatronic PSS elements; model transformations; model-based information; product service systems; Abstracts; Computational modeling; DSL; Mechatronics; Syntactics; Unified modeling language; cross-disciplinary development; model transformation; product-service systems

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