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Martin Eigner is an expert for Product Lifecycle Management, Model Based System Engineering (MBSE) and Industrial Internet. After graduating in 1980 at the University of Karlsruhe (Germany), Prof. Eigner was head of Technical Data Processing and Organization in a division of Robert Bosch GmbH. In 1985 he founded EIGNER + PARTNER AG., which was later sold to ORACLE. In 2003 he founded EIGNER Engineering Consult, a consulting company for the optimization of engineering processes with focus on Product Lifecycle Management and MBSE.

Typical Customers are Hyundai, FAW, GAZ, Daimler, BMW, Conti, Schaeffler, Miele, SIEMENS and Airbus

Since 1984 Martin Eigner has been lecturing at universities and authored/co-authored fourteen books and several technical papers on CAD, PLM, IT in Engineering, Model Based Systems Engineering and Industrial Internet/Industrie 4.0. At present Martin Eigner holds the chair in Virtual Product Engineering at the University of Kaiserslautern.



## ALM-PLM Interoperability

Model Based Systems Engineering (MBSE) has gained in importance, starting with the early life-cycle phases of complex mechatronic or cybertronical products and services. This approach enables the linking of internal and external stakeholders with the emerging system architecture, as well as the functional system behavior with the means of discipline-independent system descriptions. The Systems Modeling Language (SysML) is a standardized (OMG) set of classes, supported by methods and tools, to describe a product model based on requirements, functions, behavior and logical building blocks. Nevertheless the vast number of generated partial models raises the need for a standardized, well-defined, terminology to trace certain aspects to system and process level, especially for the emerging highly-connected cybertronical systems. Therefore the managing of information in product development processes needs to be uplifted from the traditional document-oriented approach to a business & engineering oriented Application and Product Lifecycle Management (ALM and PLM). This presentation focusses on the applicability of the integration of ALM (Application Lifecycle Management) artefacts of the early design phase into an extended PLM Backbone for administration, change / configuration management and traceability of interdisciplinary and communicating systems (↪ Industrial Internet/Industrie 4.0). This includes the definition of new standards for integration and data exchange. A very important standard for the ALM – PLM integration could be OSLC. ALM / PLM interoperability is a big issue in many companies. A successful integration of both is a key aim, for reducing costs in the development process and being competitive in the future.