Keywords: PLM, BOL, MOL, EOL, SADT/IDEF0, Information analysis, Information modeling

Project:

Despite the number of research and studies conducted in terms of product information modeling, there still remain some limitations. Design and manufacturing related information are widely addressed, whereas middle (MOL) and end (EOL) of lifecycle related information (operation, usage, recycling, etc.) are not fully covered in the literature.

In this project, the student will study the concept of product lifecycle management (PLM) and conduct a survey of the main product information models (PPO, QLM SOM, PDM Schema, OntoPDM, etc). The focus will be then placed on MOL and EOL phases. The student will study some standards such as MIMOSA (Operations and Maintenance Information Open System Alliance) and PLCS (Product Life Cycle Support) as to analyse these phases and identify related information flows, using SADT/IDEF0 approach. A use-case scenario for Electrical Vehicles will be studied based on the conducted analysis. Information gathered from this scenario may be used and generalized in order to extend the SADT/IDEF0 model.

Proposed Plan:

Step 1: Study of of PLM and state of the art of product information models (1st – 15th Oct. 2013)

Step 2: Study some standards addressing the MOL such as MIMOSA and PLCS


Step 4: Apply IDEF0 for modeling some activities related to MOL and EOL and identify related information flow

Step 5: Study of e-Vehicles scenario

Step 6: Generalization of information gathered from previous step and complete the IDEF0 model

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