

Research theme	Product Management
Research title	Showing dependencies in multidisciplinary products by development of a visual based model.
Researcher	Ard Klompe
Research period	From October 12, 2015 to October 17, 2016
Company	Lely BV
Supervisor	Juan Jauregui Becker

Background

I had the unique experience to work on a new developed product of Lely. In the end, I had to define a way to structure the knowledge used during development of the product. However, the first question was to define the creative space of the engineer. The creativity of engineers is important to the company because it can stimulate innovation and is one of the factors which caused their current position in the market. Lely is a Dutch company and develops products for dairy farms, creating all products from the production of grass to the production of milk.



Assignment

In the first part of the assignment, the main goal was to define the creative space of the engineer. In this part I identified a need for more insight in product knowledge. Further research is therefore focused on creating a structured overview of the product knowledge used during the development of the product. Different interviews with different type of engineers created a database with information, which is structured following the theory of Design Process Units (DPU). With a few adaptations, it created the needed structured overview which can be used next to the CAD models, showing qualitative information of a product.

Results

A structured overview of one of Lely's products displaying the qualitative information of a product. This information is created by showing the dependencies between elements of the product using a visual model. The model is unique in its kind, because it can relate information of different disciplines. It creates a very complete overview and can be used as basis for structuring all product information. Furthermore, it can be used as management tool and as a supportive design tool during redesign of a product.

Personal experience

To work at a company in sector I am familiar with (agriculture) has worked out well. The sober direct opinion, but also the good working vibe created a joyful place to work on my thesis. A good relationship with both of my supervisors also contributed to this. Although, if I would do it again I would have more contact hours with my university supervisor on regular basis. Due to the long distance between the company and the UT it was sometimes hard to align between university and company expectations.