

# Kjersti Øverbø Schulte, Postdoctoral Fellow

With a background in product design Kjersti is convinced that innovation is an important tool to maintain a viable industry in a high cost country.

She is trained as a product design engineer at Department of Product Design at NTNU, where she also did her PhD in Design Methodology. The PhD thesis discusses challenges and opportunities related to industrial design in the Norwegian seafood industry. The second part of the thesis is a theoretical contribution to design research. She analysed different approaches to design processes, cooperation and communication in product development projects — both in teams and between customers and suppliers. She also has experience with packaging design through practice and teaching.

During her undergraduate studies she worked with a variety of Norwegian industries, including furniture and mechanical products. In SFI Norman she appreciates the opportunity again to have contact with companies in different industries.



The research topic in the postdoctoral project is innovation culture in manufacturing companies or how to enhance practice for successful innovation. In 2011 new research areas have been established at SFI Norman, therefore the plans for the project will be slightly altered to better contribute to WP6 Product Realization. There have been three main activities in the project: Empiric research in manufacturing companies, contribution to the development of the Innovation Culture demonstrator, and publications.

*“(There are) attitudes among designers that enable or hinder innovation in companies”*

A team of researchers have followed a process in Teeness through observations and interviews, and through organizing workshops. The focus has been early stages of a product development process in a manufacturing company. Based on this insight they have developed a demonstrator with four digital learning histories that should facilitate reflections on innovation culture companies. The stories are presented by film, text and figures. Examples of questions that are raised are: Will top management involvement or flat structures enhance innovation? How should sketches and models be utilized? Can a design team agree upon the same ideas? (See illustration below).

The third activity is writing peer-reviewed publications. Topics that are presented in the demonstrator, as well as the development and evaluation of the demonstrator itself, are basis for publications. Some of the topics are also relevant for WP6 Product Realization. There are organizational issues and attitudes among designers that enable or hinder innovation in companies. These will also be the basis for an empirical study that Kjersti is planning to carry out in the fall 2011.

Main objective:

To contribute to design and evaluation of the Innovation Culture Demonstrator

Articles in progress for peer-reviewed journals:

Schulte, K.Ø. and Keitsch, M.M. “The design process as communication: Implications of Luhmann’s and Habermas’s Theories on Design Theory”, Planned submission to journals addressing design and innovation, 2011.

Schulte, K.Ø.: “Developing good Arguments in Design Teams”, Planned submission to journals addressing design and team, 2011.

Schulte, K.Ø. et al. “Development and evaluation of a digital learning history.” (fall 2011)

Schulte, K.Ø. et al. “Hinders for innovation based on innovation practice.” (2012)



## Facts

- Duration: February 15, 2010 till March 15, 2012.
- Post doctoral project in research area III, Product and Process Development
- Post doctoral position linked to Department of Industrial Economics and Technology Management, NTNU.
- Title of post doctoral project: Innovation Culture in Norwegian Manufacturing industry.