Managing knowledge representation in design
Jennifer Whyte
Boris Ewenstein

Project outline
The research project ‘Managing Knowledge Representation in Design’ explores how ‘design-intensive’ firms use visual representation (drawings, sketches, plans, etc.). We are specifically interested in the way representations are used in the development of the designed object as well as the way they are used to coordinate project activity.

Key research questions
- How do new tools for representation affect design practice?
- How do people interact in the design process?
- What kinds of representations are used in these encounters and how are they used?
- How can organizations develop and exploit knowledge through design?
Detailed Description

Product design is of strategic importance in determining business performance and competitiveness. It increasingly requires organizations to acquire information and knowledge from a variety of sources and transform this into usable knowledge that they can exploit. Problems in design are legion and many are due to the difficulties involved in co-ordinating the inputs to design and to communication difficulties among professionals working in different organisational contexts.

In the academic literature, while it is generally agreed that inter-organizational collaboration is beneficial for design, there is little consensus about the process by which different groups might be engaged in the process, or about where or when their participation is most effective. This research examines how companies address the real problems that they confront when trying to manage collaborative new product design through using representation systems to help exchange knowledge and information among different groups.

Aims and Goals

The aim of this research project is to explore how organizations develop and exploit knowledge through its representation in the design process. We also aim to investigate how new tools for representation affect design practice and how people interact in the design process through the use of different representations.

For more information contact:

Dr Jennifer Whyte
Tanaka Business School
Imperial College London
South Kensington Campus
London SW7 2AZ

Tel: 020 7594 5940
Fax: 020 7594 5915
Email:j.k.whyte@imperial.ac.uk

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