

## INFORMATION DESIGN INFLUENCE COMMUNICATION IN COLLABORATIVE PRODUCT DEVELOPMENT

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### OBJECTIVE

This research is based upon a case study conducted within a contemporary Nordic industrial cluster. This article is based on two publications concerning the subject matter "Information Design and Collaborative Product Development".

This article adds a new perspective of the subject matter, which includes of brand personality, connected to the experience of the technical communication. The article discusses further how information design may influence human perception and human experience of communication in a partly collaborative product development via an online workspace. The objective of the article is to study:

- How may design of messages in an online workspace, for instance a virtual factory, influence the involved actors?
- What effect it may have for the organisation?

### METHOD

We studied a Nordic industrial cluster, which in this article we call SECA. SECA is a cluster that covers five different business areas: apparatus; machinery; tools; development and components. The cluster has companies as members and they are from Sweden, Norway, Denmark and Finland. SECA has a so-called "business centre" where members can get together and discuss business during annual meetings. Other means of communication are their official web-site and an online workspace.

We use case study as a method to understand and explain how users experience the online workspace. The method case study may include several different kinds of sources of evidence. In this study the most suitable sources to collect data have been to:

- conduct open and aimed, semi-structured interviews with key-people.

- study contemporary documentation.
- direct observe, in form of a task analysis of the virtual factory.

The analysis of the collected data was done using a matrix, dividing relevant data into key-areas. One key-area was communication – communication between cluster members and communication in the online workspace. Communication as a factor of success is the focal point of this article.

### THEORY

Businesses communication can concern everything from businesses strategies, teamwork, technical tools etc. Communication has been discussed by countless of researchers and undoubtedly communication influences most of how humans act in a certain context. Thus, communication has been discussed in terms of its affect on product development the focus is, in general terms, on organisation management. In this paper the discussion goes further, and involves information design in collaborative product development.

Information design is an integrator in product development. If we do not understand a message we can not act up on it. A brand should be loaded with values representing the company spirit. The brand personality expresses the values of a company by for instance the visual or spatial form of a workspace and its content.

### RESULTS

The results from the case study show that the members wanted to co-operate. The members used phone, fax and e-mail as communication tools. The members agreed that a well functioning communication is an absolute condition to successful collaborative product development.

The members did not use the online workspace successfully. The design of messages was not consequent or correct, hence the online workspace were neither readable nor legible. The members do not belong. The respondents did not feel that the cluster is ready to bring home projects. They did not think the cluster members know each other well enough and they have not formed as one "company" towards the customers. Much effort must be undertaken to organise the cluster and to get to know the companies within SECA both formally and informally.

## CONCLUSIONS

First and foremost, information design influences the product development process in SECA. A well-defined design of the virtual factory can be a drive for communication; nevertheless, a poorly defined design can be a barrier.

The online workspace is a representation of the organisation. Its form and content represents the trade mark personality. If messages are understandable, human can act upon them; consequently well-defined design is a customer value. If the virtual factory is of dissatisfaction, the cluster members may not obtain bounds or experience trust, neither with each other nor with the organisation. This can lead to non-efficient product development.

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