# Innovation in interaction design processes

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#### **ABSTRACT AND THEME**

The development of new ideas is an essential concern for many design projects. In the area of information systems design, Madsen (1994) has explored how metaphors may shed new light on the way in which information technology might be used by seeing a domain of applications in a different light. In a later study based on three cases in which digital artists and designers worked together, Lervig and Madsen (2003) addressed the way in which design materials serve both as examples that pinpoint specific attributes, and as sources of inspiration that function as jumping-off points for work in a design project. Consciously looking for inspiration is part of the innovation strategy discussed by Kelly (2001 p. 280). Foster (1996) takes an even more radical stance, recommending, in his book on generating ideas, the deliberate pursuit of unaccustomed experiences.

On the one hand, when designing computer system we strive for systems resembling the previous work environment, but, on the other hand, we would also like to benefit from the power of the technology and provide opportunities not available in the current work environment. Pelle Ehn (1988) has labeled this important aspect of design the dilemma of *tradition and transcendence* and made the claim that to handle this dilemma is one of the biggest challenges in design.

The majority of literature within the Participatory Design field has been concerned about how to set up design processes which build on the current work practice of the users, i.e. the tradition aspect. But only little theory and methodology in the field have had innovation and creative, i.e. trancendence, which is the focus in (Madsen 1994) (Kensing & Madsen 1991).

The theme of the work shop is the real life nature of innovations process as part of designing interactive systems.

# **ACTIVITIES AND GOALS**

At the workshop we will share short case stories which focus on instances of innovative user contribution in design processes.

In addition, theoretical foundations for understanding innovation/creativity will be presented and applied in the analysis of the case stories.

The format of the workshop will be short cycles of case presentation (10-15 minutes), theoretical contributions (max 20 minutes) and analysis of case stories.

The goal of the workshop is to advance the pragmatical and theoretical understanding of creative user participation in design. The workshop seeks to explore how to describe, talk about, and understand the in which ways and under which circumstances users become innovative and creative participants in design activities.

## **TOPICS AND CONTRIBUTIONS**

To address various perspectives on and approaches to creative user participation, and to promote cross-pollination of ideas across these varying perspectives in the workshop, we invite contributions in the following categories:

## Design methods and techniques

Specific methods or techniques, preferably well-tested in practice, that are intended to facilitate creativity and innovation in design processes. These may address ways of involving users throughout all or stretches of a design process whole process, or they focus on specific events such as workshops, mock-up sessions etc. Contributions may also present methods or techniques that facilitate turning creative and innovative user input into viable design solutions.

# Theoretical perspectives

We also invite contributions that address ways of understanding, analyzing and discussing creativity and innovation in the design process. These may address e.g. the nature of creativity, theories on collaborative innovation, transformation of ideas into design solutions, the artefact-mediated innovation etc.

## Case studies

We further invite participants to contribute with case studies including micro-analytic studies of design sessions that present examples of processes leading to successful innovative design solutions. The case studies should focus on the process by which the innovative solutions came forth rather than on the resulting products or prototypes. Through the selection of participants for the workshop we will strive

to cover a broad range of domains form urban settings, the workplace, the home as well as digital art.

We propose a highly participatory workshop with short and concise presentations of contributions from the participants and several group work sessions. We intend to use the workshop as a platform for editing a special issues on innovation in interaction design-processes in an international journal.

#### **BACKGROUND OF THE ORGANIZER**

Kim Halskov active in the area of participatory design for the past 20 years and been part of the DIS community since its start. Together with Peter Dalsgaard he has for the past three years been focusing on issues related to design of experience oriented application digital technology.

## PARTICIPANTS ETC.

Maximum number of participants :15

Participants will be selected bases on the submission of discussion of methods and techniques, case stories and theoretical contributions (2 pages).

The workshop (if accepted) will be announced on the web

as the basic means of soliciting participants. The URL will be announced on newsgroups (CHI etc.) and as a link from the official web pages of the conference(s) (we would suggest).

## **REFERENCES**

Ehn, P. (1988): Work-oriented Design of Computer Artifacts. Stockholm Sverige: Arbeitslivscentrum.

Foster, J. (1996): How to Get Ideas. San Francisco: Berrett-Koehler Publishers Kensing, F. & Madsen, K.H. (1991): Generating Visions: Future Workshops and Metaphors, i Greenbaum, J. & Kyng, M.: *Design at Work*, Lawrence Earlbaum 1991 (155-168).

Kelley, T. (2001): The Art of Innovation. New York: Random House Inc.

Lervig, M. & Madsen, KH. (2003): Artists in the Virtual Studio. In Madsen, K.H. (ed): Production Methods: Behind the Scenes of Virtual Inhabited 3D Worlds. London: Springer-Verlag,.

Madsen, K.H. (1994): A guide to Metaphorical Design. *The Communications of the ACM* (57-62).