

# Workshop Proposal:

## Information Spaces for Creative Conversations

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### ABSTRACT

In this workshop we will explore the use of technical and other artefacts and interventions to create information spaces that facilitate, rather than inhibit, creative conversations that take place as part of the design process. We wish to support designers in engaging more flexibly and effectively in conversations that are characterized by both innovation and reflective, critical thinking, and that take place in both co-located and distributed settings. Key technological aspects of this support include the management and display of design information and critical feedback across a range of appropriate display surfaces; the capture in appropriate media – audio, video, still images – of significant design information; and the ability to replay, annotate and reflect upon such captured content. However, we are also interested in the social and procedural contexts in which such technologies may be deployed.

### Categories and Subject Descriptors

J.m [Miscellaneous]: Design, creativity, innovation. K.4.3 [Computers and Society]: Organizational impacts – *computer-supported collaborative work*.

### General Terms

Design, Human Factors.

### Keywords

Design, collaborative creativity, distributed participatory design.

## 1. INTRODUCTION

The strategic importance of creativity has been acknowledged by many commentators, both at the international level – the Nomura Institute's proposition is that "Creativity will be the next economic activity, replacing the current focus on information" – and within the UK, where the Cox review, commissioned by the Chancellor

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in 2005, sees exploitation of the nation's creative skills as 'vital to the UK's long-term economic success' [1]. Indeed the UK government has declared that innovation can be seen as crucial to both productivity growth and social gain [4].

A fertile creative conversation, of the kind that might take place as part of a design process, requires many things, including a willingness and ability to quickly generate new ideas and to release less promising ones, a focus on evaluation and development of ideas and contributions rather than the personality or position of the proposer, and the possibility to revisit and change earlier decisions. This workshop will explore the extent to which technical and other interventions can facilitate rather than inhibit such conversations.

## 2. WORKSHOP TOPIC

Much of the activity in a creative design process is now typically carried out by small groups of 2 – 5 people [6]. For example, in our creative design workshops, participants are asked to take part in 2 - 3 different activities during the course of the workshop, including analogical reasoning, constraint removal and storyboarding, all of which are carried out in groups of 3 – 5 [5].

In the context of creativity, this focus on group work, as opposed to the work of the 'lone genius' has been a relatively recent phenomenon. Research has been carried out to investigate the effectiveness of group work in this context, in terms of how many creative ideas are generated, and there has been some discussion of what kinds of groups are most productive. For example, Warr and O'Neill [7] argue that '*real group*' collaborations, where participants interact face to face and genuinely work together, should generate more creative ideas than '*nominal group*' work, in which members of a 'group' are simply working side by side on the same task.

In addition to this trend towards considering the need to support collaborative creativity, the increasing prevalence of geographically distributed design teams, and the rise of mobile computing have led to the need to support the activities of design teams which may be distributed in time or space. A team working on one part of a system or product may need to collaborate with another team in another country or time zone, working on other parts of the design. Equally, members of a design team may wish to contribute to the team's work even when they are away from

the office, sharing ideas and inspirations with fellow team members as they are encountered.

A number of studies have already been carried out to investigate the use of systems including interfaces such as interactive tabletops in promoting the creativity of co-located design teams (see, for example, [3] and [8]). Findings from these studies suggest that the use of these kinds of interfaces may increase the quality of ideas generated, and carries additional advantages in terms of recording both ideas and the processes used to generate them. However, clumsy use of technology and unsuitable interventions can break the 'flow' which many believe is essential to creative thought [2], and may inadvertently contribute to inhibitory social influences such as production blocking, evaluation apprehension and social loafing [7].

The focus of this workshop will be to identify what technical and other artefacts and interventions can facilitate, rather than inhibit, creative conversations of the kind described above.

### 3. WORKSHOP PROCEDURE

Here we provide an outline of the procedure to be adopted for running the workshop. Please refer to the accompanying programme for further information.

#### 3.1 Pre-workshop activities

##### 3.1.1 Call for Participation

We will advertise via appropriate HCI mailing lists and on the HCI 2009 website. Each potential participant will be asked to send a position paper between three and four pages detailing their past work in this area, their perspectives on the challenges and approaches for overcoming them. The workshop organizers will review the submissions and select up to sixteen participants that provide a range of perspectives. Participants will be notified of acceptance or rejection by May 12, 2009.

##### 3.1.2 Workshop website

The organizers will establish a website to advertise the workshop and provide updates on the program. The website will include a blog where participants can discuss and share information

##### 3.1.3 Practical arrangements

The organizers will prepare a list of initial workshop themes based on the accepted position papers. A workshop poster will be created, outlining the topic and goals of the workshop, to be added to during the workshop itself and to be displayed at the HCI 2009 conference. Arrangements for lunch and dinner will be made so that participants can stay together.

All position papers will be mailed to participants prior to the workshop, along with an updated program. Accepted participants will be asked to prepare both a conventional presentation and a poster, video or demonstration, based on their position paper.

#### 3.2 Workshop activities

In the first half of the workshop, participants will make short presentations of their position papers. There will be an extended

lunch break to enable sufficient opportunity for participants to get to know each other, and to peruse posters, videos and demonstrations. In the afternoon, participants will take part in a creative design workshop, facilitated by the organizers, in which they will develop ideas for future systems and artefacts that can support the kinds of creative design work discussed in the earlier presentations. The final session will be used to update the workshop poster to include both the issues and challenges identified during the day, and the ideas arising out of the afternoon workshop session. For further information, see the attached programme.

#### 3.3 Post-Workshop Activities

After the workshop, the poster developed during the workshop will be displayed at the HCI 2009 conference. The organizers will explore the publication of a journal special issue on the topic of supporting creative conversations. It is also hoped that workshop participants will collaborate in developing new research proposals on this topic. The organizers will continue to maintain the website and blog, to enable discussion to continue between participants.

### 4. REFERENCES

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