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# Distributed Participatory Design

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**Abstract**

Over the years a consensus has developed that involving users directly in the software development process can lead to more useful and usable systems. This has found its clearest expression in the Participatory Design (PD) movement. However, a limitation of PD is that it has primarily focused on project stakeholders being co-located, whereas in recent years we are starting to see software development projects involve more distributed collaborations. This workshop is aimed at researchers and practitioners with an interest to overcome the challenges of performing PD in distributed design teams. Several critical issues need examination in order to understand the usefulness and constraints of distributed participatory design (DPD).

**Keywords**

Distributed Participatory Design, Case Study, Tools, Processes, Successes, Failures.

**ACM Classification Keywords**

H.5.2. [User Interfaces] *Evaluation/methodology, User-centered Design, Prototyping*,  
D.2. [Design Tools and Techniques],  
H.4.3. [Communications Applications],  
K.6.1. [Project and People Management]: *Systems development*

## Introduction

The Computer-Human Interaction (CHI) community has long been concerned with the design of usable software applications and computer systems. Over the years a consensus has developed that involving users directly in the software development process can lead to more useful and usable systems. This has found its clearest expression in the PD movement.

PD initially grew out of Scandinavian concerns to bring democracy into the work place [7], by involving users in the design stage of the software development process. However, the focus of PD has since shifted from introducing democracy into the work place to a belief that one key success factor for design is to support the direct participation of stakeholders (including end users) in system analysis and design [6][6]. Such participation is achieved through a series of iterative workshops between stakeholders (e.g. users, designers) who will collaboratively engage in design activities [2]. The workshops are preceded by work place observations and interviews [2], which together with the workshops are intended to increase mutual learning among the project stakeholders, thereby increasing the chances of successful designs. In order to facilitate PD a number of techniques have been developed, which include PICTIVE [13][13] and CARD [17] to name just a few examples. Such techniques allow project stakeholders to communicate their design ideas, thereby facilitating the process of design.

However, a limitation of such techniques is that they are primarily focused on project stakeholders being co-located, whereas there is a growing trend towards distributed software development (e.g. [1, 9, 10]).

Software development that takes place in such environments has to deal with different dimensions of distribution like physical, organizational or temporal distribution [8][8]. The distributed nature of these development projects gives rise to a number of challenges, particularly communication and knowledge sharing [1][1, 3].

Many researchers from the CSCW community have studied how to effectively facilitate communication and knowledge sharing [16][16], however there is limited explicit commitment to *direct user participation* in design [12][12]. Nevertheless, researchers have considered PD processes in distributed settings [4, 12, 15, 18] and tools to support DPD [11, 14], and documented its many challenges. The aim of this workshop is to continue this exploration of the challenges of DPD and understand how processes and tools can be used to effectively support DPD.

## Workshop Aims and Objectives

This workshop is the second in a series of workshops covering the topic of DPD. The first workshop was held at NordiCHI 2006 [5], which brought together participants from both academia and industry. The aim of the first workshop was to scope the domain of DPD by identifying some of its challenges. The aim of this one-day workshop is to build upon our previous discussions, bring together a set of case study projects documenting the successes and failures of DPD projects. The workshop will address, but is not limited to, the following questions, that originated from the first workshop:

- What are the challenges performing DPD?

- How can we effectively support DPD?

### **Before the Workshop**

Participants interested in the workshop are invited to submit a 2 to 4 page position paper presenting a case study that used DPD. We are particularly interested in hearing about successes and failures of processes and tools used in DPD. To aid these aims the workshop shall provide a template:

- Introduction. A high-level overview of the paper and its contributions.
- The Case Study. A detailed description of the case study - processes and/or tools.
- Lessons Learned. A discussion of the project's successes and failures, specifically with relation to the processes and/or tools used.
- Conclusions. A summary of the contribution and directions for future work.

The template will allow a diverse set of case studies to be compared side-by-side, whilst focusing on the main aims of the workshop. To make the most of the face-to-face discussions between the workshop participants on the actual day of the workshop, the workshop organizers will form 4 small groups of 3 to 4 members based on interest, to work together on a pre-workshop activity. The groups will be asked to collaboratively work together on a presentation using Basecamp<sup>1</sup> - a

collaborative support tool - drawing upon the common themes from their papers.

### **Workshop Program**

This one-day workshops will focus on the interaction of the participants in order to facilitate sharing experiences and solutions as well as brainstorming new approaches and research questions to those issues.

During the first part of the day, each group who assigned prior the workshop will present the presentation they collaboratively produced, followed by discussions and elicitation of themes. Thereafter, new groups will be formed, including workshop organizers. These groups shall be arranged dependent on their interest of a theme that emerged from the morning presentation activities. Discussions and presentations of group activities will thereafter be made. Finally, the workshop participants will unify their outputs and create a poster to be presented at the CHI 2008 conference.

### **After the Workshop**

After the workshop the website will continue to act as a resource for those interested in DPD, making publications from this, previous and future workshops available. We have also agreed with the editors of the British HCI Group's *Interfaces* magazine an article to disseminate an overview of the workshop's activities and its outcomes to the wider CHI community. Furthermore, we are currently in talks with the editors of the *Interacting with Computers* journal to run a special issue on DPD building upon the outcomes of this series of workshops and the emerging research in this field.

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<sup>1</sup> <http://www.basecamp.com/>

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