

Prototyping (in) Healthcare

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WORKSHOP INTRODUCTION

As Participatory Design (PD) moves into healthcare distinct practical issues emerge. We argue that PD researchers need to respond to these new challenges by establishing an ongoing dialogue on the practicalities of e.g. prototyping in healthcare. With this workshop we intend to start such reflections by focusing on practical issues of prototyping, such as ‘how to organize PD prototyping in healthcare?’ and ‘how to run and manage prototypes in everyday medical practice?’. During the workshop the results of participants’ work on problems and solutions will collaboratively be turned into a booklet.

GOALS

With this workshop we wish to bring forth the multitude of practicalities we face as PD researchers when prototyping (in) healthcare. Drawing on participants’ own solutions to practical problems in PD research we intend to explore common challenges of doing research by prototyping. The goal of the workshop is twofold: a) to facilitate discussions by exploring participants’ work on problems and solutions when prototyping in healthcare and b) to collaboratively document the outcome of the workshop in a booklet. The booklet mirrors a first take on articulating practical problems of prototyping in healthcare as ‘tricks of the trade’. It will contain the presented situations, challenges and solutions.

RELEVANCE TO PD

The domain of healthcare is characterized by being particularly heterogeneous as it is often distributed across organizations, professions, time and space. This leaves methodical challenges to PD. Gennari and Reddy (2000) propose PD methods and techniques for systems development in healthcare as a valuable, but often neglected approach, in the early stages of the process. Introducing PD induces attention to the social environment (Sjøberg and Timpka, 1998) and aids uncovering requirements for healthcare systems (Kristensen, Kyng, and Palen, 2006). Within the PD community, projects in healthcare have applied various techniques such as video ethnography and on the spot experiments (Björgvinsson and Hillgren, 2004), workplace observations and scenario based questionnaire, participatory design workshops (Pemberton et al., 2006),

and IT prototyping experiments (Simonsen and Hertzum, 2006). Furthermore field studies, workshops and prototyping (Aarhus et al., 2009), ‘reflective probes’ (Kanstrup et al., 2008), future workshops, and patient home visits by interview and prototype experiments (Aarhus, Grönvall, and Kyng, 2010) have been conducted.

These studies all present results from using various PD techniques, but rarely discuss the practicalities of applying them. Discussions such as ‘how and with which tools researchers in practice succeeded to organize, carry out and manage these techniques’ are limited in the literature. Other similar questions include ‘how was the relationship with users carried out using which tools?’, ‘what kind of work was done to manage the connection between research agenda and design?’, and ‘how was patients motivated and health professionals addressed by doing which actions?’. Finally, ‘how was access to the healthcare setting accomplished and what kind of negotiation was necessary to engage health professionals?’ Participation can be seen as ‘the negotiation of relations in interaction’ (Matthews, 2009). It is then the kind of performative actions and materials used to establish participation that we wish to foreground. It is the tools used to plan and the class of work needed to be done before, during, and after participation takes place that we want to make visible on this workshop.

With this call we acknowledge that we as PD researchers are practitioners ourselves (Pedersen, 2007) and that we need to articulate the practicalities of doing participatory design and research in healthcare. To limit the scope we deliberately focus the workshop on the practical implementation of PD prototyping in healthcare. We appoint prototyping a broad definition ranging from the work of cooperative prototyping (Bødker and Grønbaek, 1991) to the actual testing by running the prototype as e.g. software in a healthcare setting. Prototyping thus includes the whole process of e.g. initial participative observations, the creation of early mock-ups, and the iterative co-design and use of prototypes.

SCHEDULE

The workshop is structured in two parts. In the first part participants present their contribution by giving an overview of specific situations, a layout of the problems and corresponding solutions. Each presentation is followed by a short discussion where key findings and issues are identified for use in part two. After lunch the second part is devoted to collaborative work with the themes emerged in part one. In the end of the second part we draft a first sketch of the booklet.

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Part I: Welcome and introduction (1 hr.)

Presentation and discussion of contributions (2 hrs.)

10 min – Presentation of situation/problem/solution

10 min – Discussion and thematisation

Lunch break (1 hr.)

Part II: Booklet sketching (group work) (2 hrs.)

Map themes

Categorize and conceptualize findings

Outline booklet contributions

Roundup and goodbye (1 hr.)

HOW TO PARTICIPATE

This workshop is intended for researchers and practitioners who have practical experience working with prototypes and related activities in healthcare settings. To benefit discussions, we also welcome application statements from participants who have done prototyping activities in other domains. On the workshop participants are expected to present experiences from their own work and relate it to the objectives of the workshop. We invite reflections on problems and solutions to organizing participation for prototyping, selecting and managing relationships with participants (patients, healthcare professionals, management etc.), and ways to carry out prototyping interventions that aligns with healthcare practice. We appreciate contributions on multiple levels of insights such as experiences of the practical tinkering in making prototypes work in practice, how to align research agenda with prototype design as well as how to handle multiple interests.

By September 1st participants are expected to apply by emailing a short motivation statement including an example of situation, problem, and solution to a practical problem of prototyping in healthcare to Jonas Moll (jonas@jermiin.dk). By September 13th notification of acceptance is given. By November 1st participants are asked to describe a set of minimum three practical issues of prototyping in healthcare and an account of how they were met. This includes a) selection and formulation of specific situations where practical issues of prototyping where encountered, b) description of the problem and c) the solution created, i.e. concepts, techniques or artefacts to cope with the specific challenges of the problem/situation (details will follow on notification of acceptance). To encourage discussion a maximum of 15 participants will be included. Participants are selected based on evaluation of submitted statements.

ORGANIZERS

All three organizers are PhD fellows in the Human-centered Computing research group at the Department of Computer Science at the University of Copenhagen. They all currently do research by prototyping in healthcare on the CITH-project (www.cith.dk). They share practical experience with organizing and conducting PD in healthcare including co-design workshops and experiments, running and testing web-prototypes, and managing relations with healthcare professionals and patients. *Tariq Andersen* has an MSc in IT from the IT University of Copenhagen. His doctoral research is

concerned with methodological issues of design and research of IT in healthcare. *Jonas Moll* has an MSc in Computer Science and Communications. On his doctoral research he focuses on how notions and techniques from service design can inform and strengthen the work of prototyping new healthcare services. *Troels Mønsted* holds an MA in Information Studies and is engaged in research on design of IT supported communication and coordination across professional and organizational boundaries in healthcare.

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