

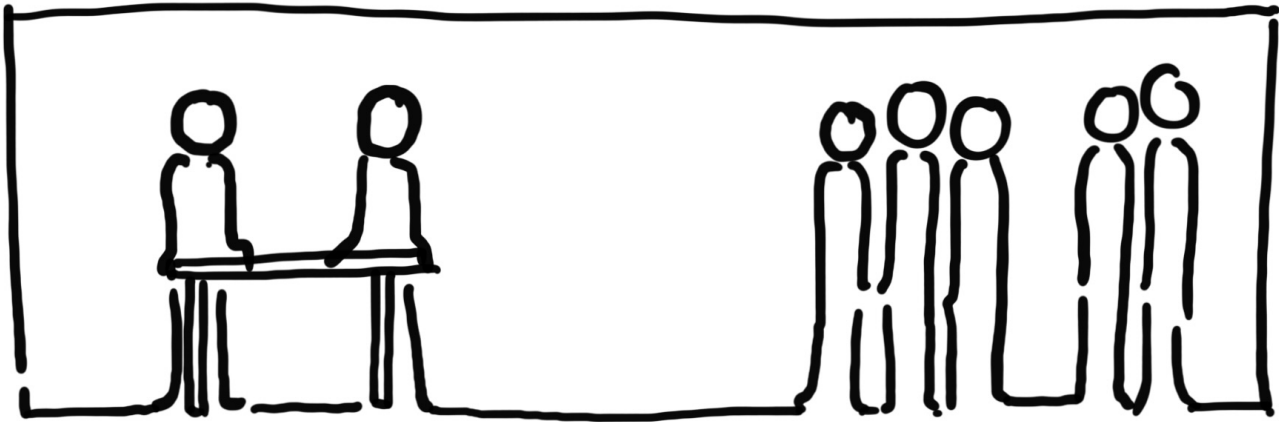
Codesign ending up with n=1

Henrik Mucha

henrik.mucha@iosb.fraunhofer.de

Fraunhofer-Institute of Optronics, System Technologies and Image Exploitation IOSB

Karlsruhe, Germany



ABSTRACT

This abstract not an abstract. It is in fact a disclaimer. This paper is not a classic paper. It is a thought piece. In the tradition of the workshop it is a stream of consciousness on a topic relevant to the workshop. It has no references. It is utterly opinion from personal experience. It is meant to start a conversation. A conversation on incentives for participation when designing in knowledge-intensive domains such as healthcare.

KEYWORDS

Participatory Design, Codesign, health

1 USE AS CONVERSATION STARTER

Codesign is a methodological approach that offers the tools to include the people who will be affected by a technology into the process of developing it.

With research moving back from remote into the physical world, I feel we need to talk about incentives. But let us start at the beginning with an example.

In a recent project my task was to design a dashboard that would support physicians during consultation hours. Physicians increasingly ask for support in terms of systems providing information derived from data. The latter is referred to as Clinical Decision Support Systems (CDSS). Of course such systems need human-computer interfaces. One relevant manifestation of such systems are dashboards. A dashboard is a one-screen view which gathers relevant information for a specific use case in a structured way. Structure emerges from relevance and prioritization. In a complex domain such as medicine assigning relevance and priority can seldom come from the technologists designing it. It must come from the people using it, the actual experts as holders of the expert knowledge. Codesign can tell us how to practically externalize such expert knowledge and make it accessible in the form of design artifacts which may serve as boundary objects for the following design iterations. I fast forward to the result here and can state it works quite well.

However, here is the catch.

Such experts - and you must not think of all physicians as potential users but the small numbers of every sub-category and sub-discipline - are a very rare resource. Doctors account for and

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

Veröffentlicht durch die Gesellschaft für Informatik e.V.

in K. Marky, U. Grünefeld & T. Kosch (Hrsg.):

Mensch und Computer 2022 – Workshopband, 04.-07. September 2022, Darmstadt

© 2022 Copyright held by the owner/author(s).

<https://doi.org/10.18420/muc2022-mci-ws02-243>

more importantly bill their time in minutes. A patient consultation lasts 7 minutes on average in Germany. Software which was meant to make things better, actually made it worse turning simple sign offs into 20-clicks processes.

With Participatory (PD) and Codesign we basically ask: I need X amount of your time to design better software.

Consequently, we then also need to explain why: I need your time for doing X so that I can do Y.

I feel there is no satisfying answer for this. In the project I described earlier I am lucky that I have one power user participant. But it doesn't seem fully right. Hence, I propose to discuss this matter during the workshop. As a conversation starter I will use the remainder of this position paper to raise a handful of questions as a first step to describe the problem space of incentives for codesign in expert domains.

Codesigners are often faced with limited or no resources at their hands. Hence, incentives must be clearly formulated.

Incentive = How do the expert participants actually benefit from taking part in e.g., codesign workshops? Better software, yes ... at

some point in the future ... maybe.

PD and Codesign are too hard to explain.

Designer (enters stage): No, I do not have people do my job! But I need people to do my job!

"PD is a movement originating from the Scandinavian movement of workplace democracy ..." apart from us, who does actually care?

Ok, I make it short, it is workshops, are you in?

Yes, but what about ethics? Health data and physician patient interactions are sensible and must be protected.

For all those reasons, many projects end up with the expert user count (n) = one. My experience is it still works and is better than none. Therefore, the question I hope to discuss at the workshop must be:

Is n = 1 enough?

If not, how do we incentivize larger n of barely available experts?