Notes on the boring basics stuff in PD proliferation

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ABSTRACT
This paper describes the rationale and some basic features for building up a particular kind of handbook for designer-user relations, namely, one genuinely targeted to designers in industry unaware of even the basic techniques of collaborating with users or even analyzing their work and environments. There is a need to show the variety of different methods in answering typical design problems, need to present basic skills so they scale up from the very basics to referencing the cutting edge, and, lastly to include a section of case-examples of typical moments to allow clear comparisons over different approaches; their requirements, costs and possible benefits.

Keywords
Designer user relations, industry, proliferation of methods, teaching

1. INTRODUCTION
Following the seven years of our studies in designer-user relations, it has become obvious that technology producers as well as their prospective users would benefit from more acquaintance with participatory design methods. However we have faced dire difficulties in finding adequate literature or teaching courses that would be sufficiently available for the technologists we have been working with. Building on these experiences there is now a project to come up with a handbook and teaching materials for designer-user relations that would start from the very basics. The rationale and some basic principles of this ongoing work are outlined below.

2. BUILDING UP FROM IN-DEPTH CASE STUDIES
Two of our longitudinal in-depth studies with ICT companies in health-care sector provide insight on the prerequisites and tendencies of industrial production that need to be considered in attempting to proliferate more participatory ways of working in technology production in business contexts.

The first company (designing an illness specific electronic health record for diabetes professionals) realized already in concept design that their understanding of medical practice was too superficial to determine the relevant contents of their database. They were recommended to collaborate with local diabetes practitioners, which led to "participatory design in the wild", a successful co-design project between multiple organizations, in which none of the participants had heard of the advanced methods available. This collaboration was highly beneficial for the company, and also falsified company's original concept both technically and in regard to medical practice. Nonetheless, the company abandoned the collaborative way of designing after the second generation of the system, on the grounds of now knowing enough of the content area ...also in regard to their next products in different branches of medicine [1]. It could be asked why was participatory strategy abandoned at least temporally when the company management changed? Why is the rationale and benefits of PD so hard to communicate in business environments?

The second company developed a safety device for the elderly and the disabled. They were not as fortunate as the company in diabetes care, and ended up developing the first generation device to the market without contacts with its eventual end-users. The device, and particularly the way it fit in the work practices of nurses and alarm-centers had to be significantly redesigned. Originally the company designed their device to be a one-for-all, foolproof and to stand alone so it could be manufactured and marketed in a mass without any further ado for the company. Once the device was in use, the company realized it had to involve itself with ensuring how the system fitted work and life in user-sites, how it was being integrated with other technologies, and what kind of procedures were arranged to use it. The company gradually grew to form collaborative relationships with its key organizations utilizing its technology, albeit it took considerable time for them to create effective ways to interact [2, 3].

The cases illustrate three points that have come across also in other studies I have been related to, and which I find relevant for thinking how designer-user relations can be improved:

a) The companies had no or only a vague knowledge of user-centered design (let alone participatory design) methods available. They tackled use-related issues mostly through intuition, home-baked means, or occasional usability tests and marketing studies [3, 4].

b) When even modest (and not methodologically informed) collaboration between designers and users emerged it had a high positive relevance for the usability and usefulness of the product. While this benefited the designer companies, it was equally beneficial for the users who no longer had to struggle with alien technical solutions [3] or finally gained the kind of tool they had craved for some time [5]. These de facto ethno-methods of user-designer collaboration should be

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acknowledged, and bridged to more sophisticated approaches.

c) The personnel had limited resources to appropriate more user-centered and participatory ways of working in their R&D and limited time to acquaint themselves with them.

3. GUIDELINES FOR INTRODUCTORY HANDBOOK FOR DESIGNER-USER COLLABORATION

While these findings suggest it would be a beneficial idea to try to proliferate PD even in modest steps to industry, they also pose a problem relating to the existing candidates for toolkits that can be presented for the designers and their user-partners. The coming guidebook and teaching courses try to address the following problems:

Finding grammar for and comparisons in between different methodologies in understanding use and collaborating with users. The ethnographic and PD methods often require expertise not readily available for high-tech companies. So do various forms of interaction design and other available schools in working with users. Specialized methods for mediating design and use also tend to appear as universal fixes for designer – user relation. It is not easy for designers and engineers to determine which methods suit best different technologies, phases in product development, environments of use, and the resources available to them. This forms an extra barrier from moving from the home-baked methods to more refined approaches. Finding good grammar and some kind of guidelines for differentiating and choosing between different approaches would be a significant improvement.

Scaling the methods from the very simplest core idea to most refined approaches. One of our findings was that just making designers to spend some hours in users-environment had a bearing on the features later designed. If such a extremely crude from of ethnographic observation is beneficial, then it should be encouraged and bridged so that the designer can easily work his/her way towards more fuller appreciation what kind of information such a practice can yield and by which means. For such first steps it is simply not helpful to describe methodologies as monolithic packages that take several hundred pages to read not to mention appropriate [6]. Moreover, there already are fine approaches for those who already are well in their way in collaborative design [7-9]. The trick, then, at least one worth trying, is to scale how different methods are presented: from the very core and crude ideas that have relatively weak power and big risk in leading to distorted view, towards more refined understanding of what and how basic skills such as observation, interviewing, prototyping and so can be accomplished. Ultimately, this would also allow for careful referencing to useful extra readings and cutting edge research, so this would become available and introduced for those who decide they want to experiment further with collaborative way of product development.

Presenting different pools of methods in relation to real-life case studies. In addition to presenting methods and approaches for user-oriented and collaborative design, the handbook would benefit from presenting and evaluating different approaches in comparison to real life case studies from both PD and non-PD design projects. This would allow for concreteness and detail in discussing what was truly done and what were the outcomes that followed. Moreover, it would allow laying out some of the typical moments in which firms are typically in need of (or later realize that they would have benefited from) improved understanding of the use and values of the users of their product and/or more thorough collaboration with them. Such moments, to be illustrated with case examples include: Creating and assessing early concepts, choosing and critically evaluating concepts, understanding and analyzing "implicated" or "secondary" work and use in different contexts of use, utilizing and refining information about usage in design process, as well as managing sustained collaborative relationships with users.

4. NOTES ON THE POLITCS INVOLVED

While suggesting such an approach, I recognize there are inherent dangers associated with this project. It could well be argued that this kind of "PD for beginners" project runs a great risk to be politically naïve, even harmful. Its focus and rationale is restricted to avoiding the production of technologies that distort people's work practices and daily living. This kind of politics of usability and narrowly defined utility has no serious built-in mechanism how it would differentiate being used in designing societally desirable or in creation of potentially suppressing technologies [5].

Moreover, there is always the danger of the illusion of "learn PD in 20 minutes from the scratch" as with any basics introduction handbook. Nonetheless, the currently prevalent way of presenting PD – often presuming one has the tacit skills of a PD designer or a social scientist to begin with [8], or, alternatively, using the length of explanations so tediously thorough my research subjects would never go through it [e.g.10] - has come with it a price in how well participatory techniques have proliferated.

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