The West Wing: Fiction Can Serve Politics

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Abstract

The increasingly popular design technique called 'personas' provides a natural way to introduce issues of diversity and power relationships in software development. Persona development is a powerful technique that must be used carefully. It may be the most effective way to introduce participative approaches into mass market software development. This is of broader significance because it is increasingly risky to work locally without carefully considering the directions of commercial software development.

Key words:

Product development, personas, participatory design, values

Introduction

In the 1970s and 1980s, before and after attending graduate school, I worked developing commercial off the shelf software. I returned to research primarily because the development process seemed ineffective at producing useful, usable software. Exploring the organizational and methodological challenges seemed worthwhile. This research led to some sense of the underlying issues (Grudin 1988; Grudin 1991a; Poltrock and Grudin 1994). However, clear prescriptions—better methods—were not obvious.

In 1988, several presentations at the second CSCW conference described Nordic approaches to system development. These differed radically from my experience. I couldn't assimilate them. In 1989 I arrived in Aarhus for a year that became two years. Within weeks I found a piece of the puzzle that I had been missing: the gulf between the in-house and commercial off-the-shelf development contexts (Grudin 1991b).

When developing a system for a single organization, social and political issues—empowerment, routinization, participation—are more evident and approachable than in the highly mediated world of product development.

Some researchers have tried to adapt or invent cooperative techniques for product development, but in the end these seemed minor embellishments to HCI techniques long advocated by, for example, Gould and Lewis (1983). And of significance to this debate, to be palatable in large organizations the techniques generally became value-neutral. Political considerations were filtered out.

Most HCI researchers and practitioners in large development organizations have reasonable personal values. The problem is not that these practitioners claim an 'innocence' that is absent or subverted. There is (along with a pragmatic element to be sure) an idealistic belief that enough user involvement of any kind will eventually resolve issues of equity and power. Unfortunately, experience does not bear this out.

A promising Scandinavian-influenced approach was developed by Karen Holtzblatt (Whiteside, Bennett and Holtzblatt 1988; Holtzblatt and Jones 1993; Beyer and Holtzblatt 1998).

It began as contextual interviewing and then contextual inquiry in the 1980s, focusing on obtaining an understanding of the work processes to be supported. It evolved into contextual design in the mid-1990s, with a greater emphasis on methods for communicating the understanding to the many other team members involved in a typical product development project.

This mirrored a major contemporary thread in CSCW research: how to communicate ethnographically-derived insights to designers and developers. Both efforts reflected the realization that it was a serious error to think that "the designer" is responsible for design. Especially in product design, and as systems grow more complex, myriad people contribute to a design. Communication among these people—communication about an understanding of future users and their work practices, about design ideas and how they could affect use, about qualitative and quantitative usage data and their implications—is often the critical challenge.

Personas

'Personas' are detailed fictional characters created and used in the design and testing of software. If constructed properly, if based on and updated with rigorous ethnographic, quantitative, usability, and other data, personas can overcome the problem faced by other approaches, described above, in communicating the understanding reached by a few to the many involved in most commercial software projects. Persona use does not replace other methods, it complements them.

I was skeptical when first told about the technique, but as I learned more, persona development seemed the answer to the question I had asked a decade earlier in Aarhus: How can we realize, in the commercial software development context, the understanding and empathy that participatory design at its best produces?. People frequently do engage fully with fictional characters, as when reading a good novel or watching a film. When we engage in this way, we apply the deeply rooted, powerful human ability to reason generatively about people we know.

In 1989 I had the pieces of the puzzle–I had even studied method acting–but did not put them together.

My observation is that personas can be a powerful tool. Powerful tools come with risks. The preceding account is intended to suggest, not convince. More details on persona use (and abuse) are in papers presented at PDC 2002 and DUX 2003. (Grudin and Pruitt 2002; Pruitt and Grudin 2003).

Reintroducing the political

Of significance to the present discussion, unlike other HCI methods, the use of personas forces the social and political nature of design decisions to the surface. Persona creators decide precisely whom the design is to support. Each persona has a gender, age, race, ethnicity, family or cohabitation arrangement, socio-economic background, work and home environment. This provides an effective avenue for recognizing and challenging assumptions about users. One could populate an entire persona set with middle-aged white males, but it would be obvious that this is a mistake.

I was first hired as a professional software developer in a computer company in 1973 and have worked off and on in such contexts over thirty years. This is the only technique I have seen that is attractive to many teams while surfacing such issues. By all means, note the risks and shortcomings of personas, preferably basing your objections on data, but please also demonstrate a better alternative for the context of product development.

The playing field

The rest of this essay focuses on another change relevant to the politics of participatory design: Why it is more important, wherever we work, to pay some attention to commercial software development, and how we can do that.

The world has been inverted in little more than a decade. Ten or fifteen years ago, participatory design was based on involvement from the beginning of design and its advocates criticized human factors or usability engineers for being brought in late in a project to evaluate or assess a design. This was a valid critique, though well known to the practitioners involved. It arose from organizational assumptions about software development that took time to overcome.

These assumptions have been overcome in many software companies. Usability is often routinely involved from the initiation of a project. In contrast, participatory design researchers have to contend with commercial software developed elsewhere, and may focus on its local adaptation. In such cases, it is now participatory design that arrives when much of the design is set.

The significance of this historical trajectory can be underestimated by those in academic or industry research labs.

Ten years ago, commercial activity was proscribed on the Internet. Fissures were evident, but official gatekeepers still thought purity could be maintained. At that time, researchers were a significant fraction of the people working on software development. Today we are a tiny fraction. In fact, researchers now are only *educating* a small fraction of tomorrow's developers. We have to think strategically about how we can influence technology design and deployment.

In early 2003 I was an opponent in a Ph.D. defense at Trondheim. In "Global reach, local use / Design and use of electronic patient record systems in large hospitals," Gunnar Ellingsen describes the sobering history of efforts to introduce IT in Norwegian hospitals. In the early 1990s, two approaches emerged. Medina, a "bottom-up" approach, was based on supplementing and augmenting existing work practices and was funded by regional hospitals and development funds. NORA, a "top-down" approach, envisioned a more ambitious restructuring of work practices and included Norsk Data, the country's leading IT company. The more ambitious project succeeded in capturing the imagination of national agencies and received generous funding. The system was envisioned as serving a broader Scandinavian constituency. This reduced the regional hospitals' influence on system design. The erosion of local influence was to continue.

When the project and Norsk Data encountered difficulties, the German company Siemens stepped in. They obtained the contract by promising to support a unified design. They were developing a European solution, so could

promise to devote more resources to the project. Unfortunately, the system they finally delivered was highly unsatisfactory. Ellingsen quotes a hospital employee: "First, we asked for a 'BigMac', but that became difficult and was too much. Accordingly we accepted a 'regular hamburger' instead, which also became difficult. So we ended up with only the bun."

It did not end there. Siemens made acquisitions in the United States which further shifted the focus of their system development. Regional Norwegian hospitals were a shrinking concern.

It is nice to think that "whatever we can do, matters," as Beck wrote, but perhaps we can be more strategic than that. Working on Medina-like projects may seem satisfying until flattened by the tremendous changes in the IT sphere. It is increasingly risky to work locally without carefully considering the directions of commercial software development.

If you want to improve local nutrition, you have choices. You can work with local markets and diners. You can work on the "local adaptation" of fast food, perhaps convincing McDonalds or Pizza Hut to add Brunostburgers alongside McLaks, or lutefisk topping as an alternative to anchovies. Or you can try to influence McDonalds headquarters directly, difficult but not impossible. Or some of each. If you choose to work with a local diner, pick one that won't be acquired or replaced by a fast food chain.

Consider again Ellingsen's electronic patient records. If Siemens used a persona-based approach, we could try to convince them to make one of the personas a nurse in a Norwegian regional hospital. If we succeeded, the Siemens product team would suddenly want to learn as much as possible about such people and their work environments. Participative, ethnographic, and other approaches could provide the content flowing through this communication conduit to the team.

Acknowledgement

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