
Value Added Tasks: Reflecting on Decision-Making with Communities

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Abstract

Any picture we establish of values in computing will be incomplete until we seek to make visible the values embedded throughout the deployment, dissemination, and appropriation of designs. This abstract reflects on the role of decision-making throughout design projects in two case studies. Mundane and often untold aspects related to the specific configuration of, positioning, and assumed ownership of designs, are equally as significant as those that we seek to 'make visible' during design and development stages. Thinking beyond the form of software, system architecture or interface design, into how we deploy and use a system will make visible values in computing within a wider social and political context, and uncover the values of those other than the designer.

Author Keywords

Values; design; community organisations; technology; decision-making; case study.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

Our ability to diagnose where and ascertain when values become embedded in design projects requires a

consideration of the wider social and political factors that surround designs as they are used and appropriated in the public domain. The values in computing do not simply become visible when we expose technology to the real world; they become laden with new values from new stakeholders.

A Civic Turn

HCI has taken a 'Civic Turn' [7] that can be characterised by a shift toward researchers no longer designing *for* communities but designing *with*, and alongside communities. We are increasingly seeing this enacted through collaboration with civil society organisations. Moreover, this work is defined by 'handing over' the reigns of technology deployment to groups of citizens [1], community organisations [7], charities [6], or activists [8,10].

HCI work in this context is often reported in a 'clean' scientific way, but in practice this type of work involves a much 'messier' [4,7] scenario in which the role of the research team, collaborators, and other political, civic, and community stakeholders has a bearing on the deployment of designs. Mundane, and as such, often untold matters of civic technology deployments are key to understanding how human values become embedded in seemingly neutral design things and deployments.

Finding Value in the Mundane

Research is increasingly becoming a collaboration between researchers and community organisations, and this collaboration is increasingly characterised by community organisations taking over the deployment of technology designs into the real world. Within this context, the value embedded in design by designers and value in software by those who program it, are

augmented by the values of the people who bring the designs into communities.

The values inserted at this stage are often unreported on, and as such, rendered invisible by HCI researchers. Through looking at two research projects carried out, I will reflect on how these values may be uncovered, by looking at the mundane aspects of civic technology deployments.

Case 1: Configuring the Technology

During a civic technology study in rural Northern England, a research team led by myself deployed a mapping and voting technology using distributed public screens (see *fig.1*). This involved working with a civil society organisation and a campaign group. Within this context, we can ascertain the values embedded in the technology from the collaborating associations, through focusing on the seemingly simple and straightforward decisions made throughout the project.

When reporting on this work, instead of focusing primarily on an evaluation of the technology 'in use', we highlight the various trade-offs and decisions made during the study, how our collaborators made sense of, and went on to use the collected data, following the deployment during the evaluation of the study. Following [2,3,5] we highlighted some of the human work that goes into planning and overseeing the use of consultation technologies for community organisations, and the ways in which the research team guided and influenced this process.

Our reflections on this fieldwork highlight specific issues related to mundane decisions made during the project. For example: *forming of the right questions* on the

Adding value when entering the Wild

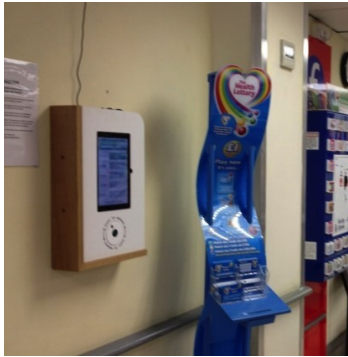


Figure 1. A technology deployed at a supermarket where “footfall would be high.”



Figure 2. A system in use, where facilitators explained the technology in different ways revealing their own values.

devices; the identification of and *gaining access to the right locations* for promoting engagement and discussion; and the difficulties community organisations face in using and responding to the data and insights collected (i.e., *making sense of the data*).

In these studies, the seemingly mundane task of setting the questions on the devices was complicated by the overall goals and values of the community groups. Their held values about not only what a ‘good’ question was, but also what the questions should try to determine in terms of local matters of concern, were at odds with ours, and revealed their values around social class, socio-economics, and politics, among others. The campaign group favoured a poll which asked simple questions “are you in favour of...?” The second group did not want to raise expectations about how they would respond to the answers. They had money to spend on investment in the area, but did not want to omit to anything new until current development work was complete.

Gaining access to the right locations was also problematic. Through the two deployments that made up the project, we deployed civic technologies across seven different locations for at least two-weeks and up to eight weeks at a time. Strategic selection of locations was important in both of the projects. Prior to each of the projects, the research team assumed that good places for locating these boxes would be busy places. In the first deployment, the campaign group thought the technologies should be deployed in locations where they captured “a lot of footfall”, like in a local supermarket (see *fig.1*). They had experience of, and an interest in the value of petitioning and high numbers were important to them.

In the second deployment, the community development organisation wanted to locate the devices in locations associated with tourism, as they saw this as the most important demographic, and they preferred locations and businesses in the more affluent part of the town. They considered these the places they would get the “best responses”. This shows a feeling by them that the opinions of business owners and tourists meant more, as they were the people ‘bringing in the revenue for the town’. Here, a capitalist agenda is the priority at the expense of a more democratic process, revealing values around socio-political views.

It also became clear at this stage that our collaborators simply did not have the social capital within the town with which to access certain places. As such, the research team found themselves conflicted—should we let our community partner organisation continue in their planned process of consultation, or should we push back and direct them to using other locations, knowing that we are simply replacing their values with those of ourselves?

Furthermore, when it came to making sense of the data at the end of the deployment, which was heat maps in response to questions about ‘place’, the community organisation representatives were able to put a narrative on the data, which was inconsistent to what we ascertained from our fieldwork and interviews with residents who had interacted with the devices. This shows a mismatch of values from those using the technology to those who commissioned its use for their consultation, and more importantly the representatives were able to apply their values on community generated data, created from the technology we designed.

Case 2: Framing the Technology

In a different project, we designed and deployed another information system. This project, involved participants taking part in a game to encourage participation in local decision-making (see *fig.2*). Here, we worked with two organisations, a community group and a Parish Council (lowest level of governance in UK) who facilitated and ran the events in which the system was used. Here, the values of not only each collaborating organisation, but of each member of the organisations who deployed the system became visible. When listening back to the audio recordings of the session it became clear each member put different emphasis on how the system worked, how it should be interacted with, and what participants expectations should be on the impact or outcome of interacting with the system.

For example, the members of the Parish Council, who had recently formed the neighbourhood plan group, had done so in order to attempt to stop a development project in the village. It was on discovering that it was not in the jurisdiction of the neighbourhood plan to stop development, they turned their focus from a petitioning and lobbying group to a consultation process. The values the group felt about the democratic process at a local level, and the role of the community in 'protecting' green spaces and the 'character of the village' became apparent in the ways they framed the task of taking part in the game. They framed the workshop as a way of having a direct line to the local authority, which was not the case. The community organisation who facilitated the events were keen to emphasise their agenda, and this was visible through who they invited to take part in the events. Their values influenced those

who had access to the technology, which in this case was linked to who had a voice in the ongoing consultation.

Even if we were able to assume that the technology itself was somehow value neutral, the values of those who bring it 'into the wild' [9] also become embedded, and go toward the overall picture of the values in this technology. The partner organisation were able to transform, or deter from the values the researchers and designers had intended for the technology, in the way it is framed as a task, and established expectations on possible outcomes of the participation.

Value Added Tasks

Within this paradigm we can establish that the systems we design, and the values we assign to them can have unintended use, and can be re-appropriated from the use we constructed. Furthermore, the values at this stage are affected, and further complicated by, a wider social and political context.

Thinking beyond the form of software, system architecture or interface design, into how a system is eventually deployed and used, and even how the data the systems create are interpreted, gives us a more complete picture of values in computing. Greater honesty and critical reflection on these issues is therefore needed, not just in civic technologies research, but also in a broader range of participatory projects in HCI where such issues around values might arise. In doing so we can make 'less visible values' visible, by focusing on the task of getting the computing in the public domain.

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