# Ethics Strikebreaking

## Reflecting on Values & Ethics in Design Practice with Design Fiction

**Richmond Wong**
School of Information
University of California Berkeley, USA
richmond@ischool.berkeley.edu

## ABSTRACT

Inspired by research interviews with technologists, this set of design fictions uses a problematic feature request for a workplace IoT sensor platform to highlight how technologists might think about values implications and ethics of technology as part of their everyday practices, and the difficulties they may encounter in addressing them. The fictions take the form of artifacts and messages that might be part of a UX professional's everyday work. Through the fictions, I also suggest the need for further design fiction work depicting moments and sites of technical practice.

## INTRODUCTION

In addition to using design fiction to imagine how technologies might be used or adopted in different sociocultural contexts, design fiction can help probe the values and ethics involved during technologies' development and maintenance. I create fictions in the form of everyday mundane objects familiar to UX designers and engineers [8] (such as internal company forums and emails) to interrogate their practices.

## THE FICTIONS

Following a world building perspective [2], the fictions on the next two pages involve 3 different companies that exist in the same fictional world, to view it from multiple "entry points":

- InnerCube Sensing: InnerCube creates data analytics platforms for offices and workplaces with embedded IoT sensors. InnerCube's clients are other companies who want to instrument their offices. The end users of InnerCube's systems are the clients' employees.
- BiggeCon: A company that operates customer service call centers and is one of InnerCube's clients
- Anchorton Consulting: A company that provides "human management solutions"
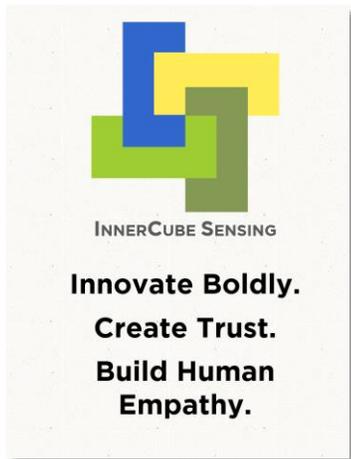
**Fig. 1 (above). A poster of InnerCube's 3 corporate values**



**Fig. 2 (center). On an internal forum, a UX team working at InnerCube discusses potential concerns about implementing new personally-identifying data analytics features for their client BiggeCon. UX Lead Josh Pollock notes that he'll raise these concerns with InnerCube's senior management.**

**Fig. 3 (right). Gary Green, an InnerCube Vice President, emails a response to Josh Pollock about his team's concerns. Gary reframes the corporate values in a different way than JPMason does (in Fig 2), and suggests two services from a services contractor, Anchorton Consulting, to address the situation.**

## InnerCubeSensing: #UXTeam

**JoshPollock** 09:20
@channel – Hi InnerCube UXers! We just got a request by BiggeCon to customize their installation of their InnerCube Sense platform. Their headquarters already have the physical sensors installed, but they want to add on some new features:
- Connect badge IDs with SmartStall analytics for automatic in-toilet drug testing
- Connect individual IDs with in-wall heartrate monitors to capture productivity metrics.
- Create a dashboard to show managers individual employee productivity statistics with the drug-testing and heartrate productivity metrics.

**OliviaL** 09:34
I hesitate a bit to bring this up, but I'm not fully comfortable implementing these features. Most of our installations provide aggregate office statistics. In the past we've only used individually identifiable dashboards for security-based features. Providing these individualized data to managers to use in any way they want seems to hurt workers' privacy.
Also BiggeCon operates contracts for customer service call centers – they're known for high worker turnover, and these features seem to increase the potential harm to workers.

**AidenF** 09:37
I don't particularly like BiggeCon either, but isnt how people use our products beyond our control? Plus employees consent to "identifiable uses" when they register with InnerCube

**OliviaL** 09:38
Is that really "consent"? Also don't we have contract language or something in our Terms of Service about "reasonable expectations" of privacy?

**JPMason** 09:41
I concur, I don't feel comfortable designing these things for BiggeCon. Aren't our company values posted on those big posters on the wall? "Human Empathy," and "Creating Trust"? For BiggeCon's employees, we seem to be violating those if we go forward.

**JoshPollock** 09:53
I appreciate the honest feedback all. Let me send these concerns up the chain.

**To: Joshua Pollock, UX Lead @ InnerCube**

**From: Gary Green, InnerCube VP of Diversity, Inclusion, and Risk**

**Re: BiggeCon Project Questions**

Josh—

I appreciate the concerns that your team members have about BiggeCon. However, allowing any worker to not work on a project due to their personal objections risks a slippery slope. The project already underwent a legal review, and everything will be GDPR compliant.

I'd ask you to communicate with your team that our company's values of "human empathy" also apply to empathizing with the needs and desires of our clients, who are in this case BiggeCon and their leadership team. With "create trust," we're seeking to build trust with our clients, as well as maintaining our trust with the public. Taking a public position on BiggeCon's and other client's actions by refusing to work with them risks looking political and partisan in the eyes of the media. Imagine if BiggeCon was a political organization? I could see us getting called in front of Congress in no time.

That being said, we're looking at 2 potential options offered by Anchorton Consulting to help mitigate your team members' concerns, and meet BiggeCon's needs: Anchorton's **eTask Auctions** or **eStaff Contracting** services. Either of these should help us complete the project without having to play all this out in the public eye. I'll update you once I talk with Tom and the other VPs.

--Gary

↩ Reply        ➝ Forward

**Fig. 4. Anchorton Consulting's website. Anchorton is a company that specializes in "Human Management Solutions." Anchorton highlights two services that would nominally solve the InnerCube problem: that some of InnerCube employees object to implementing a solution for their client, BiggeCon. If InnerCube utilizes eTask auctions, employees could bid on what tasks they want to (or do not want) to work on, so that those without ethical qualms could work on the BiggeCon project. With eStaff Contractors, InnerCube would contract out the BiggeCon project to Anchorton to complete. Notably, while these services address Gary Green's view of the problem (in Fig 3), these "solutions" do not address the original concerns about privacy and BiggeCon worker conditions raised by OliviaL (in Fig 1).**



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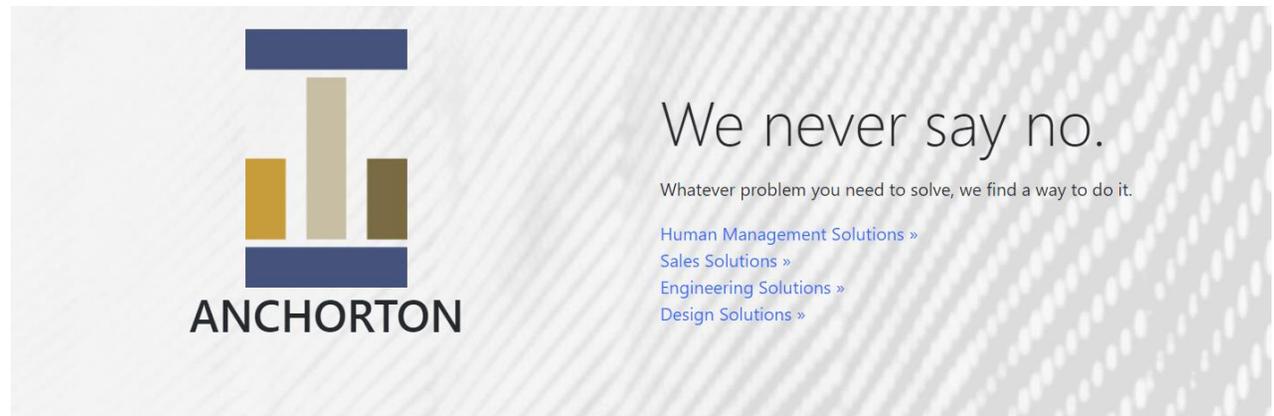
## eTask Auctions

Optimize your employees' job assignments and let them work on what they want to work on! PMs break a project into smaller tasks. Employees bid on the tasks they want. Customize your own auction mechanisms and units for bidding. Options include: **rewards points**, using **real currency** to help you minimize your expenses, or matching tasks based on employees' **expertise** or their **personal values and beleifs**. Dashboards allow you to see trends in employees' habits, and bidding data can also be linked to employee reviews.

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## eStaff Contractors

Do you have sales, engineering, or designs tasks that your employees are unable or unwilling to do? Our eStaff Contractors will do it for you! Whether it's due to a lack of skill, expertise, or personal beliefs, we're up to doing the task, as *we never say no*. We use **discretion and uphold your company standards** so that your customers will never know they're interacting with a contractor. Our pay-by-project plan lets you utilize our services as much or as little as you need to get the job done.

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## CREATING DESIGN FICTIONS FROM INTERVIEWS

These fictions are inspired by a series of interviews of UX professionals and engineers working at technology companies in the San Francisco Bay Area. Like InnerCube Sensing, these interviewees work for enterprise software or platform companies; and their clients are other businesses—they do not directly sell products to end users. This may result in situations, like in the fiction, where meeting a client's needs (BiggeCon) has the potential to harm end users (BiggeCon's workers). These interviewees already had pre-existing interest in thinking about the social and ethical implications related to their work, and discussed some of the barriers and challenges to surfacing or addressing those in their workplaces. A variety of strategies that interviewees used to try to bring up social issues of their products are highlighted in Figs. 1-2, including appealing to corporate values, discussing potential harm to end users, or looking to legal contracts that specify inappropriate uses of a product or service.

## Ethics Strikebreaking

Anchorton acts as what I term an "ethics strikebreaker." They problematically try to frame concerns about technology values and ethics as a problem of individual technologists' personal values and beliefs, rather than social ones. By doing so, Anchorton's solution to addressing technology values and ethics problems is simply to find another technologist who has different personal values to do the work. This undermines potential collective understandings of values and ethical issues related to technology development. This bypassing of ethical technologists also potentially renders many of HCI approaches to technology ethics (e.g., ethics education, values elicitation tools for technologists, methodologies like value sensitive design) as less powerful and impactful.

Anchorton is also meant to aurally seem similar to Pinkerton, a private security agency which conducted strikebreaking and anti-union efforts in the U.S. in the 19th century.

Figs. 3-4 reflect the frustrations—and sometimes failures—that interviewees experienced when trying to surface values or ethics implications with management. Sometimes others in the company will interpret corporate values in alternative ways or see values and ethics as a "slippery slope" (Fig 3).

One interviewee discussed a situation where their team did not feel comfortable adapting their software for a particular client because of a recent controversy where the client organization caused harm to its users; management found a contractor to do the job instead. The interviewee was ambivalent, noting that they were glad not to violate their personal values by working to support the client, but were unsatisfied that their initial concerns about the client's harmful practices were never addressed or discussed. Other interviewees stated a desire for collective action, which might more forcefully surface values and ethics issues. These stories inspired Anchorton, which takes the contracting-out solution a step further. Anchorton acts as an ethics strikebreaker, using the friendlier term "Human Management Solutions." eTask Auctions pits workers' interests against each other, to get those who are less concerned about social implications of technology to bid to work on projects like BiggeCon. eStaff Contractors outsources the ethically questionable work to Anchorton subcontractors. In both cases, the underlying ethical concerns about BiggeCon's potentially harmful uses of sensing analytics are never addressed. Anchorton also promises public discretion, inspired by interviewees discussing how values and ethics in their companies are often addressed through a public relations lens.

## REFLECTIONS

These fictions use a problematic implementation of a workplace IoT sensor platform to highlight how thinking about values and ethics of technology design and use might appear as part of designers' and engineers' everyday practices. For me, the most "evil" aspect of these fictions is not focused on the design and use of the sensor platform, but rather focuses on the *existing* ethical engineers and designers (or "values advocates" [6]) who speak out against a problematic use of their product, but their concerns get obfuscated, dismissed, or hidden by management. Even with technologists trying to do the right thing, negative outcomes can still occur, in part due to the "evils" in the systems of power in which they are embedded. Beyond ethically-trained technologists, a successful reflective or critical technical practice also needs organizational support.

These fictions serve as part reminder that values and ethics emerge at moments beyond use of an artifact, but also at moments of building, managing, maintaining, and repairing sociotechnical systems [3,5]. While design fictions are often used to highlight values and ethics issues when technology products are used, sold, adopted or deployed in different sociocultural contexts (e.g., [1,4,7]), the fictions in this paper also serve in part as a call to use design fiction to look beyond moments of use, to also interrogate moments and sites of technical practice—building maintaining, and repairing—where values and ethics may come to the forefront and be contested.

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