The Design Fictions of Philanthropic IT: Stuck Between an Imperfect Present and an Impossible Future

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ABSTRACT

In this paper, we examine the stories about philanthropic IT that circulate via product websites, marketing materials, and third-party news articles. Through a series of productcentered case studies, we surface these texts' implicit and explicit visions about the (near) future of philanthropy. We detail their prescriptions about how, why, and in service of what ends nonprofit organizations could, should, and ought to leverage IT. We also examine their underlying assumptions about philanthropy: how social good is accomplished, how philanthropic organizations are-and might be more-effective, to whom organizations and beneficiaries should be accountable, and the terms of that accountability. Analyzing these visions as design fictions, we argue that they help cultivate unrealistic anticipatory relationships to the present and entail concomitantly unrealistic imperatives for the philanthropic sector. We conclude by arguing for the crucial role of HCI scholars in disrupting these impossible futures, and by highlighting areas needing further, re-imagined, research.

Author Keywords

Design fiction; nonprofits; philanthropy; discourse analysis

ACM Classification Keywords

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

INTRODUCTION

I wish we used technology a little bit better. – Max, nonprofit worker

Max's lament about technology use that could be "a little bit better" reverberates through our many experiences with IT in nonprofit organizations over the last 8 years. As HCI scholars, we have conducted numerous studies about the use—and non-use—of information technology in the nonprofit sector [15, 21 22, 41, 43, 44, 45, 46, 47, 48]. As a

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former nonprofit professional, the second author worked in nonprofit IT departments for about 4 years before pursuing academic research in HCI [9]. Throughout these experiences, we have repeatedly encountered organizations on the cusp of adopting a new IT system: for staying in touch with constituents; for recruiting new volunteers or donors; for publicizing events; or for tracking constituent data. Our interlocutors were almost always optimistic that the new system would make things easier, despite that each previous adoption had ultimately led to a previous (or the current) state of dissatisfaction:

This [new tool] is going to be customizable, so it should be a lot easier to do that [the counting task I do manually right now because even though the current system also supports it, I prefer to do it myself].

– Taylor, nonprofit worker

Those not (yet) in the process of adopting a new IT system often told stories about how they ought to be: ought to be more up to date, ought to be tracking more information, ought to be taking advantage of a new tool:

I have not [set up Constant Contact] yet...but it might be something that I should think about in the long run. – Charlie, nonprofit worker

All too often, we found that newly 'adopted' tools were not truly integrated in daily practices. Instead, workers described how they imagined that they could be using them:

I just have a list of those people in Excel, but I could totally put those in Volgistics, I just haven't yet. {laughs} - Sam, nonprofit worker

Philanthropically engaged members of the public were also often quick to identify new systems that they thought nonprofits would benefit from if only they knew about them:

[I] emailed [the Humane Society] since I was setting up online coupons and when [the grocery store website] asked if you wanted to add a charity they weren't listed... [and I thought] maybe they weren't aware.

- Jesse, Humane Society donor

Haunting these and many other conversations is a specter of technology use and adoption as a moral imperative. Despite numerous trials and tribulations with IT use in practice, our interlocutors repeatedly expressed views that technology *could* be better used, *would* be beneficial if deployed, *ought*

to be adopted, or *should* be leveraged. This paradoxical coupling of a moral imperative with the maintenance of an optimistic anticipatory relationship despite repeated failures inspired the present research. It is clear that stories of philanthropic IT are shaping the user experience of these tools as much as the actual moment of use. What are these stories? How do they hold together? Where do they fall apart?

In line with other HCI research in this area, our prior research centered on examining philanthropic practice and the user experiences of philanthropic IT systems (e.g., [41, 43, 44, 45, 46]). In this paper, we take a markedly different approach, stepping back from the moment of use to examine the anticipatory discourse that shapes the user experience before and beyond the moment of use (see [7, 23, 49]). What animates anticipatory visions of a technologically-improved future of philanthropy? What exactly do these visions entail? What implicit assumptions do these visions make about philanthropy and social good? Are they realistic? What kinds of things are elided in their imaginative articulation?

To interrogate these visions of philanthropic futures directly, we draw on an archive of product websites, marketing materials, and media articles for a selected set of currently available philanthropic IT systems as our empirical evidence. By analyzing these varied texts, we trace some of the pervasive tropes about philanthropic futures as imagined and embedded in IT design and marketing. Through a series of five product-centered case studies, we first articulate explicitly the visions of a better future promised to those who would adopt and integrate each tool into their routines and practices. As anticipatory texts, these visions embody normative claims about how, why and in service of what ends nonprofit organizations could, should, and ought to leverage computing technologies. They outline feature sets and use cases, and also entail broader normative claims about philanthropy: how philanthropic organizations should carry out their work, how organizational practices could be improved, to whom organizations and beneficiaries should be accountable, the terms of that accountability, and how social good is best accomplished in the first place.

Inspired by Wong and Mulligan's analysis of concept videos [49], we then analyze these texts' anticipatory visions through the lens of design fictions: stories that craft not isolated use cases, but visions of broader social worlds. In the discussion, we examine the ways that these tools embody particular formulations of the problems faced by philanthropy itself and the social problems in which philanthropy aims to intervene. We argue that while many of these visions *sound* appealing, the underlying problem formulations to which they respond are not well grounded, and the solutions they put forward are not realistic. In stark contrast to our interlocutors' positivity, we present a more skeptical position about the impossibility of the philanthropic futures imagined by the stories and promises of these IT systems. In foregrounding the rhetoric of false

progress that accompanies these various tools, we argue that the circulation of these unrealistic fictions has real consequences: they promote unrealistic imperatives for nonprofit organizations who struggle to 'keep up' by adopting the latest and greatest tools. In so doing, we respond to recent scholarship calling for HCI researchers to take critical and political stances about the broader impacts and ramifications of the tools we are often complicit in promoting [4, 31]. We conclude by arguing for the crucial role of HCI scholars in disrupting these impossible futures, and by highlighting areas needing further, re-imagined, research and design.

PHILANTHROPY AND IT

In recent years, a growing area of HCI scholarship has focused on the use of ICTs within the nonprofit or third sector: in contexts of volunteering, advocacy, charitable giving, or the provision of social services. Much of this research has drawn attention to the numerous challenges faced by nonprofit organizations in adopting and leveraging new computing tools [11, 15, 27, 30, 42, 45, 46].

In the face of these challenges, there remains significant pressure for the sector to find ways to better integrate these tools in order to "keep up" with technological progress in other sectors. While some researchers have suggested ways of ameliorating these issues through the redesign of specific tools and systems [41, 43, 44, 45, 46], a bigger problem is beginning to manifest across the breadth of this research. Beyond the features or designs of particular tools, recent research suggests that the underlying logics and assumptions built into these tools may be more broadly out of alignment with the logics and core values of the nonprofit sector [14, 22, 42, 43, 44, 45]. For example, charity-based approaches to philanthropic IT fail to support the care work that characterizes everyday philanthropy [22]; new tools for "micro-volunteering" stand in contrast to the "philosophies" of volunteer coordinators [45]; and the deployment of electronic health record in a volunteer-based clinic was plagued by an underlying "mismatch between the technological and human infrastructures" which led "to diminished volunteer roles, an increased workload for paid employees, and a negative impact on the quality of patient care" [42].

In these cases, the issues facing philanthropic IT are bigger than any one system, set of features, or set of use cases. Such research suggests the need to interrogate more directly the underlying logics, assumptions, and problematizations embedded in philanthropic IT. In this paper, we examine directly the stories that animate philanthropic IT and its promise of better futures.

METHODS

Our research method is rooted in an understanding that stories about computing matter as much as technical artifacts in shaping the user (and non-user) experience of IT (see [20, 23]). Following analyses of technology stories in HCI [23, 33, 49], we explore the logics and promises of philanthropic tools by examining key texts featuring these systems: websites, marketing materials, and news articles.

At the outset, we constructed a list of 55 philanthropic IT systems encountered in our previous research and industry experience, as well as technologies that had been featured in nonprofit sector publications (e.g., *Nonprofit Quarterly*) and popular American media outlets (e.g., *Fast Company*). To better understand the design space, for each technology, we categorized the intended purposes of the technology (e.g., fundraising, volunteer management, outreach), collected a short description of the tool, and searched for any mentions of the tool in major news outlets.

In choosing a subset of these technologies and texts for in depth analysis, we sampled widely to obtain a broad vantage point over discourses in philanthropic IT. We chose tools that were either in widespread use, or as evidenced by press coverage were key players in setting the conversation about what technology can and should do for philanthropy. We sought to include tools that represented different segments of the philanthropic IT sector as well as tools that were aligned with unique inflection points in technical innovations (e.g., the internet, social media, mobile computing).

We draw most heavily on the websites of the applications and software systems themselves, including both current websites, and archived versions of prior sites available through archive.org. Product websites serve multiple roles: they are a public face of the company outlining key values; they are a sales pitch to potential clients, customers, or users outlining features and situating the tool's purpose and benefits; they are resources for information about potential products to use (e.g., comparative information) and an entry point for product support information after the fact; and they are sometimes an entry point to using a web-based tool itself. The websites thus provide direct insight into how the tool is framed for popular use and consumption, making explicit claims about how and why the particular computing system or application should be used, and for whom it is intended. Our analysis began with an examination of the rhetoric of technology company home pages and general "about us" or "learn more" pages. As the project developed, we expanded our analysis to include other relevant pages, with particular attention to product specific pages. We complemented this analysis with an examination of news articles, press releases, and marketing materials about each company and tool.

In line with our questions about the kinds of futures envisioned by these tools, we take up the texts and materials of this research as anticipation artifacts—sites where the anticipation work (see [37, 49]) of certain people (e.g., technology makers, marketers, and public commentators) condenses into a circulating medium for spreading those visions—and around which others' anticipatory visions of the future might begin to coalesce. Our analytic strategies thus focused on surfacing and making available for interrogation the normative claims about philanthropic organizations and social change that are embedded in these texts' rhetoric. Following Feldman and Almquist [19], we used multiple analytic techniques to surface and tease apart the implicit and explicit claims about the futures that IT promises to bring about. In addition to using memoing practices throughout our analysis (see [12]), we also conducted a "rhetorical analysis" [19] of key texts for each technology to surface implicit claims and used semiotic squares [18] to identify and map internal tensions.

In this paper, we present five cases drawn from our analytic process that allow us to foreground the futures envisioned by key players that span the broad space of philanthropic IT. We chose cases that could create an evidentiary foundation for the development of a conceptual argument that helps to shed light on the tensions set up by anticipatory rhetoric and the ways in which HCI scholars should respond. Notably, we do not offer a comparative content analysis of these cases, but rather present an initial exploration of each of these texts as design fictions. Thus, the presentation of cases that follows is not strictly parallel-e.g., some have a temporal dimension and some do not. In this way, our case selection and argument style follows a more humanistic tradition (see also [5]) that develops and leverages each case as a means of further probing the discourse of philanthropic IT and draw into relief a set of themes for further discussion.

CASES

We begin the cases with an analysis of Blackbaud, described by a former nonprofit professional as the "300-pound gorilla" of philanthropic software. With over 35 years of experience, and an ever-increasing portfolio of offerings, Blackbaud is the one software provider with which everyone in philanthropy seems familiar. We give particular attention to their flagship product, The Raiser's Edge. We then examine two other prominent and long-established tools: Charity Navigator and VolunteerMatch. Our last two cases focus on newer technologies. Attentive.ly is a social-media marketing tool, still small, but acquired by Blackbaud in July of 2016 while this research was underway. We then close with an examination of the rhetoric of HandUp, a San Francisco startup that has attracted the attention of a slew of well-known investors-including Mark Benniof, Alexis Ohanian, Jason Calcanis, Ron Conway, and Google.org [79, 86, 88]—and reporters for tech [82], philanthropic [85], mainstream [87, 88], and local [83] media outlets. This "kickstarter for the homeless" [88] is as an increasingly prominent figure in public discourse.

Blackbaud's The Raiser's Edge

Blackbaud's website extols its prominence as "the world's leading cloud software company powering social good" [57]. Developed in 1981, a year before the company was founded, Blackbaud's first product was a homegrown program for tracking student accounts at a local private school [50]. In the years since, they have expanded to a broader market, and today, claim to bring "35 years of unparalleled expertise" to their work that "serve[s] the entire social good community" [55]. Employing language like "serving" and "partnership,"

their rhetoric figures technology as a support for existing social good organizations, not as a change agent for redefining philanthropy: "[w]e take great pride in providing nonprofits with the technology and services they need to operate and communicate more efficiently and effectively" [55]. Appropriating the language of private sector "Customer Relationship Management" (CRM) tools, Blackbaud offers nonprofits the "World's Best Fundraising & Constituent Relationship Management System" [56].

Blackbaud's flagship product, The Raiser's Edge, is a database system for tracking donors and memberships. Over the last 25 years, promises about what this software offers to nonprofits has shifted as new technological developments—from the database, to the internet, to new forms of data tracking—have taken the rhetorical spotlight.

The 1996 The Raiser's Edge for Windows product webpage-the earliest available in archives-proclaims in large bold font that the "client/server version [is] now available using the power of Oracle, the world's leading relational database" [51]. This new database offered to not only give nonprofits access to "extensive biographical information" about donors, but to be able to do so "instantly" [51]. Using this database, nonprofits might improve donor relationships by "remember[ing] to send birthday greetings to your top donors or to send follow-up letters to everyone attending your latest special event" [51]. The ability to "export data in many formats" makes it easier to "create personalized acknowledgment or appeal letters" [51]. Integrations with existing phonathon practices offered new ways of saving time via efficiency and automation: "[Print] customized phonathon forms that display the data your callers need. After the call, simply detach the pledge card from the phonathon form, place it in a window envelope and the reminder for the donor is on its way" [51].

In 2001, with the growth of the world wide web, Blackbaud began offering RE:NetSolutions, "a comprehensive suite of Web-based services that enables you to extend fund-raising activities to the Internet" [52]. The 2001 RE:NetSolutions product page calls out the "tremendous potential" of the internet for fundraising, and promises to "help you take full advantage of these new opportunities" [52]. The new product press release opened with a recent radiothon success story: "listeners opted to use the Internet instead of their checkbooks to donate \$127,000 ... More than 1,100 people donated online, resulting in a 187% increase over last year" [53]. This tool promised new avenues for donations and also to do work on behalf of the nonprofit. Tapping into broader narratives of technology-enabled automation and mobility (see also [23]), the 2001 homepage featured a person in a hammock, on a beach, at sunset, with the headline "Your Web site can be fund-raising even when you're not" [54].

BlackBaud's current Raiser's Edge product likewise plays into more recent data rhetoric, offering "data health tools" including a "scorecard" that "evaluates how valid, complete, and accurate an organization's supporter contact information is" [59]. Making this data meaningful and actionable includes the provision of "a financial impact statement, which estimates the total budget dollars wasted per campaign due to inferior contact records" [59]. The software offers to help organizations "build a 360° view of your supporters" and leverage "smart segmentation" to "focus your fundraising efforts on those donors with the greatest capacity and likelihood to give to your organization" [58].

Over these years, Blackbaud has also developed a broader range of new products, and acquired several related companies to grow their portfolio beyond fundraising. Across these products, we find the reflection of Blackbaud's underlying model of philanthropy: social change happens through the nonprofit organization, and a key role for technology is in improving the operation and administration of that organization. Throughout its product line, refrains like "quick and easy," "increased effectiveness," and "easy-touse," promise that new IT will make useful information more effortlessly ready at hand. Blackbaud markets itself as "provid[ing] more value through IT" so that nonprofits can "spend less time on data hygiene and upgrading systems" and "spend more time engaging constituents, supporting your organization's growth and fulfilling your mission" [60]. New systems promise to free up time through new efficiencies as the original power of the database is further magnified by integrations that allow nonprofits to carefully target donation requests and to cultivate those relationships most likely to lead to an immediate revenue stream.

Blackbaud's rhetoric illustrates how new possibilities come with new imperatives: to "take advantage" of new IT. These systems, however, are rooted in new values and definitions of what is 'advantageous': growth is better than stasis, the valuable constituent is one who gives the most money in the immediate present, and a "leading edge" nonprofit is one that is effective at raising ever-larger funds, one that incorporates ever-more technology while spending ever-less time using or maintaining that technology.

Charity Navigator

Like Blackbaud, Charity Navigator also embodies an understanding that positive social change happens through the work of nonprofit organizations. However, while Blackbaud focuses on supporting organizations' own work, Charity Navigator— "your guide to intelligent giving" [63] — focuses on helping donors make informed decisions. The tool grew out of its founders' anxieties about the scandalous misuse of funds by some charities:

[T] hey were witnessing reports of scandals at a variety of local and national charities. Since many of these charities were household names that people assumed did good work, they concluded that they needed an independent and objective source of information to rely upon. [65]

One of six rotating header images on today's Charity Navigator website warns visitors of "FAKE CHARITIES" offering the ability to "See the list here!" Another advertises their updated "CN Advisory System" which classifies charities on a "concern advisory" list at a "low" "moderate" or "high" level of concern [63].

The Charity Navigator website debuted in 2002, just as the internet was gaining mainstream adoption in the United States. Their mission follows in the path of other nonprofit watchdog services, most notably that of Guidestar, which has offered a searchable database of detailed reports and copies of nonprofits' tax returns since 1994. By contrast, Charity Navigator promises a simpler four-star rating system— "easy to understand and freely available to the public" [61]. At launch, Charity Navigator claimed to be "the largest independent charity evaluating service in the world" [64]. It remains a popular service whose ratings exert significant influence in the sector today [70]. Nonprofit organizations understand their rating on Charity Navigator as "absolutely critical to attract new resources and donors" [70].

Charity Navigator evaluates organizations along two dimensions: "financial health" and "accountability and transparency" [64], metrics that serve as a proxy for organizational worthiness.

The financial health dimension aims to "show donors how efficiently we believe a charity will use their support" [68]. It is based on a combination of "short-term spending" and "long-term sustainability" and is computed through the evaluation of each charity along seven "performance metrics" [67]. From these metrics, we can learn much about how Charity Navigator expects a 'good' philanthropic organization to operate. Four of the seven metrics are about "efficiency" in spending, directing more funds to the mission than administrative costs, and three metrics are about "financial capacity," with organizations working toward financial growth and maintaining a responsible asset to debt ratio, "as do organizations in other sectors" [67]. The "accountability and transparency" dimension is based on further information gleaned from tax forms, as well "information collected from a review of the charity's website." An organization is scored along seventeen metrics to "assess whether it follows best practices of governance and ethics, and whether it makes it easy for donors to find critical information about the organization" [68].

Though they have long expressed a desire to be able to tell donors "how effective the charity is at maximizing what they do" [62], this has been difficult to accomplish. Putting a primacy on "only reviewing quantifiable and reliable data," and originally finding that IRS tax forms were "the only piece of publicly-accessible information available," Charity Navigator has used financial and transparency measures as the sole basis for their star ratings [62].

However, in recent years, Charity Navigator—alongside Guide Star and the Better Business Bureau's Wise Giving Alliance—has faced significant criticism for relying on financial data—and "overhead measures," in particular—as the primary metric for assessing a nonprofit's worthiness [71]. As the editors of *Nonprofit Quarterly* wrote in 2013,

[T]he use of overhead as a primary proxy has always been intensely flawed and has brought unfortunate consequences. Organizations have starved themselves of necessary infrastructure in a misguided attempt to fit a single formula. What's worse, many nonprofits feel that they have to fudge their numbers to fit, which means obfuscating the real information about how much it costs to serve a variety of organizational needs across size, stage of development and field. [71]

In the last year, Charity Navigator has begun revamping its metrics. Although the seven criteria for financial health have not changed, the mathematical formulae for computing these metrics have been reworked to allow for a greater range of administrative expenses. The addition of a third "results reporting" dimension is in the works, as part of a "multi-year project," but not yet live [68]. In the future, it is promised that new metrics will remedy the flaws in current rankings, without losing the simplicity of a zero-to-four-star system.

In sum, Charity Navigator envisions a future in which increased transparency and accountability—operationalized unproblematically in an easy-to-use star system—will facilitate better outcomes. As explained in their mission statement, guiding intelligent giving means "advanc[ing] a more efficient and responsive philanthropic marketplace in which givers and the charities they support work in tandem to overcome our nation's and the world's most persistent challenges" [66]. Rather than being swindled by fake charities—or wasting money on inefficient charities donors can direct their money to the places where their dollar will have the most impact.

VolunteerMatch

Tracing its origins back to 1998, VolunteerMatch was early on the scene of technologies designed to leverage the internet in innovative ways. Per a 2008 report from the Carnegie Foundation, which funded VolunteerMatch in its early years, the original inspiration for the organization grew out of the Silicon Valley NetDay event—a day of service when technology industry workers would install internet wiring and hardware in local schools [73].

Today, 18 years later, the rhetoric of VolunteerMatch remains much the same. The homepage announces to visitors: "We bring good people & good causes together" [72]. Between the headline and the "Join Us" button, potential volunteers are compelled to: "Find a cause that lights you up. Get in touch with a nonprofit that needs you" [72]. A three-part infographic farther down the page explains the "Why," "How," and "Who" of the service.

The "Why" of Volunteer Match reads as more of a description of *what* the service is: "We are a community: we connect people who want to change the world together" [72]. Nonetheless, the problem implied by this rhetoric is one of

social disconnection. The Carnegie Foundation report made this explicit, telling the story of the organization as such:

What prevents millions of would-be volunteers from getting involved in causes they care about? Connecting with the right organization or volunteer opportunity can be a time consuming and frustrating experience. ... At the same time, most nonprofit organizations are focused solely on their missions and cannot afford the time or resources it takes to get more people involved. ... In short, there is a longstanding knowledge gap between worthy organizations that need help and individuals who want to provide that help. [73]

The "How" part of the infographic explains the use and impact of VolunteerMatch in a simple 3-row diagram with a line snaking between the nonprofit's actions on the left, and the volunteer on the right, mediated by VolunteerMatch, in the center. The first step is for a nonprofit to "list [an] opportunity," on VolunteerMatch. Volunteers come to the website to "find what you love." Upon locating a suitable opportunity, a prospective volunteer contacts the associated nonprofit, who contacts them back in return, and then both volunteers and nonprofits end their usage of the tool with a "Happy Face." After the initial "contact" between volunteer and nonprofit, the diagram implies that the problem of disconnection is solved [72].

The final third of the infographic, the "Who," gives only a count of people matched: to date, over 11.4 million volunteers have been "matched" by the website with over 109,000 participating organizations [72]. Irrelevant here is any description of organizations, causes, volunteers, or the people and places impacted by the volunteers and organizations in question. Rather, what matters is a simple tally of the newly facilitated connections.

This part of the VolunteerMatch story illuminates the conjoining of conventional wisdom about a central promise of the internet—connecting people—with an identification of the most central problem facing nonprofits—a lack of connection to the right people. When the key problem of philanthropic organizations is operationalized in this way, the particular tool appears as a natural and obvious remedy: VolunteerMatch is perfectly poised to leverage a technological potential in service of fixing recruitment. Yet, as we will discuss more later, this promise also entails a new imperative for organizations to generate volunteer opportunities that might be easily posted and advertised.

Attentive.ly

Attentive.ly is a social media marketing tool for missiondriven and philanthropic organizations. Launched in 2012, Attentive.ly was recently acquired by Blackbaud (in July of 2016, during this research) [76]. Attentive.ly represents a new generation of philanthropic IT, centered around the affordances of social media rather than databases and the internet. Attentive.ly comprises a social media analytics system—including a visual statistics dashboard—and a suite of social media posting tools. Its features center on identifying and targeting social media users who have large audiences, and who talk about issues relevant to the organization and its mission. As the homepage calls out to visitors, the central goal of using Attentive.ly is to "Convert Supporters into Social Media Ambassadors" [74]. Instead of Volunteer Match's millions of volunteer matches or Blackbaud's 35+ years of experience, they advertise that they have identified "20 million+ influencers" for a selected set of well-known organizations "including the World Wildlife Fund (WWF), United to End Genocide, Greenpeace, and the Dallas Morning News" [75].

Although Attentive.ly does not clearly articulate a 'problem' to which their technology responds, the first menu option on their website is "Solution," which takes one to the Attentive.ly product page [74]. The implied problem, suggested by the product, is one of the organization *not* understanding their constituent base, *not* reaching out in productive ways, *not* identifying the right portion of their base to target with marketing and outreach. Traditional means of marketing and communication are no longer viable in the world in which Attentive.ly is born. As described in the Blackbaud acquisition press release, Attentive.ly offers nonprofits new opportunities to "engage" "people on the front lines" and develop "real-time passion" for "social good movements" [76]. Each of these terms deserve unpacking.

As a social media analytics tool, Attentive.ly operationalizes public "engagement" in terms of social media statistics: numbers of likes, retweets, shares, and clicks in response to organization emails. Notably, it does not provide any way to operationalize and link these statistics to other forms of "engagement"—showing up to volunteer or responding to solicitations for donations.

The "people on the front lines" who Attentive.ly helps organizations target are "key influencers" [76]. Attentive.ly operationalizes this construct through metrics like the "Klout score"—a third-party metric that claims to represent an individual's "influence" on social media platforms, derived from things like "the ratio of reactions you generate compared to the amount of content you share" [77]. Unlike other tools, Attentive.ly is not focused on courting donors or engaging volunteers, but instead focuses on courting people who speak to large audiences. The presumption is that these key influencers will act as marketers, "influencers whose social posts can drive clicks… and donations… and action" [74] (ellipses are from Attentive.ly site, and do not denote elisions in our quoting).

Attentive.ly promises to help organizations tap into "real time passion" [76], something that happens in-the-moment, and can be leveraged by organizations—but only if they are paying attention. As header text on the homepage prompts visitors, "Your People Are Talking. Are You Listening?" Attentive.ly features tools to help the organization reach out with just the right timing. As explained on the homepage,

"When a supporter says 'I just love this!' you send a triggered email that says 'Here's how we help that." [74].

In targeting outreach based on Attentive.ly alerts for certain keywords and hashtags, the organization can tap into broader conversations and further the growth of "the entire social good movement" to which an organization belongs [76]. Like engagement, this social good "movement" is operationalized primarily in terms of the growth of a discourse. Despite a rhetoric of "movements," the concrete outcomes Attentive.ly claims to provoke (and allows the nonprofit to measure) are not features of a social movement as defined by, for example, social movement scholars (e.g., [13, 34]). Rather, the concrete outcomes of using this tool and the implicit definition of what constitutes a 'movement' and 'mobilization'-are rooted in an understanding of the internet as a marketing medium. The movement can be understood as measurable through discourse analytics, and the conversation is, itself, a manifestation of a 'movement.'

An undercurrent of anxiety about the technological present is developed through descriptions of Attentive.ly as poised at the "beginning of a transformation" garnering organizations new "abilities" and "empowering" them to be "good listeners." Without adopting a "modern marketing tool" like Attentive.ly, the implication is that organizations risk operating in the past, stuck on the wrong side of a sweeping sociotechnical transformation. In this new world. conversations happen online. "Listening" means eavesdropping or monitoring, being always aware of the conversations that are happening on social media which one is not actively part of and interjecting organizational solicitation into broader forms of public discourse.

HandUp

Our final case examines a San Francisco-based tech company, HandUp, which offers "direct giving for the homeless and others at-risk" [78]. Growing out of a 2012 app for direct giving via SMS-based mobile payments, today the public benefit corporation is primarily centered around a homelessness-specific crowdfunding site, "a kickstarter for the homeless" as the *Wall Street Journal* described it [88]. They also offer a gift-cards that individuals can give in lieu of cash to people asking for money on the street. Whereas the technologies discussed so far have all been domainagnostic and designed in ways that work alongside existing organizations in the philanthropic sector, HandUp takes up a specific social problem, homelessness and poverty, and aims to intervene more directly. In Silicon Valley language, HandUp is about "hacking homelessness" [84].

In contrast to organizations like Blackbaud that aim to "serve" and "partner" with existing organizations, HandUp's mission statement roots the technology company itself in a moral obligation to "do something...about the problems we see in the world... to leverage technology and the power of human relationships to fight urban poverty" [79]. Given that poverty still exists—despite years of work by existing organizations—the implication is that existing intervention strategies are fundamentally broken. A *San Francisco Gate* profile of Broome, HandUp's CEO, recounts the inspiration:

Broome got the idea for her startup one freezing winter night in 2012 as she was walking along Market Street. She passed a woman shivering, asleep in a doorway on top of a thin blanket. ... "I just stopped and thought, 'Why are things not adding up here? Why doesn't this woman have a place to stay?'"

"I thought, 'In this city with all this innovating, all this building, here's a problem that needs to be solved, and maybe I can do something about it.""[83]

HandUp thus promises to disrupt the space of poverty solutions directly. Understanding the power of computing to be fundamentally transformative, HandUp asserts that, with it, "new solutions to poverty are within our reach" [79]. The promise of technology is realized in a vision of a future characterized by reduced barriers and the power of the crowd: "everyone has to jump through so many hoops normally to get help, but we just want it to be easy. ... what we've come up with is really pretty simple-crowdfunding, connecting people with the crowd" [83]. While the website imagery foregrounds a direct interaction between an apparent donor and recipient—with a cell phone mediating between the two individuals-the HandUp process is notably indirect. HandUp operationalizes "fighting poverty" through monetary transfer from those who have more to those who have less via organizational intermediaries.

Despite the promise of "new solutions," this practice of charity is well trod in the nonprofit sector. However, in the specifics of the transfer, we find some differences. The HandUp-mediated transfer of money is neither wholesale nor without strings attached. Donors do not give a blanket amount "directly" to a nonprofit or individual for spending as their expertise deems best. Instead, the system mediates donations through the crowdfunding platform and specific agreements with partner nonprofits. For donors, HandUp offers a two-part promise: "give directly" and "see your impact." Donors "get total transparency through our partner nonprofits who serve those experiencing poverty" [78].

As explained in a *Forbes* article celebrating the "uber-cool B Corp," HandUp offers an alternative to "panhandling for spare change" [86]. Instead, "people in need" create a crowdfunding profile, and "give passersby a card which contains a URL" [86]. Individuals' online profiles are "verified" by specific local nonprofits, and donors can be certain that "100% of the money will be applied to removing obstacles which are keeping the person in poverty" thanks to the mediation of HandUp and these local organizations [86]. For example, after an individual's fundraiser for a security deposit, "HandUp collects the money and then provides it directly to the landlord, ensuring that the donors' funds are properly deployed" [86]. In addition to crowdfunding, HandUp also offers a gift card. In this case, the donation is again fully supervised by HandUp and its nonprofit partners:

The HandUp gift card is redeemed with our local nonprofit partner for equal value in food, clothing, transportation, bills, or nearly any other basic need. ... Cash is never exchanged and the funds are managed via the case manager at the nonprofit. [80]

In addition to fundraisers for individuals experiencing poverty, HandUp also offers crowdfunding campaign capabilities to nonprofits. These campaigns are also meant to be "transparent" to donors. Notably, it is permissible to use the system to "raise money for their clients, operating expenses, and special projects," though many campaigns tend towards specifics around which a funding narrative can easily be developed in the required video-centric format: a "youth services van" or a "holiday food drive."

HandUp offers a system for mediating donations promising new degrees of transparency to assure that donors' money is "properly" spent. This crowdfunding offers a new technical means of fundraising, but also creates new demands for nonprofits and the individuals they might serve—each donation coming only in response to a produced video ask.

THE DESIGN FICTIONS OF PHILANTHROPIC IT

We opened this paper with a brief description of the broader inspiration for this research: the recurrence of a pattern of coulds, shoulds, oughts, and woulds in our many conversations about IT use, adoption, and non-adoption in philanthropic contexts. Each of the IT systems examined in the cases above draw into relief slightly different facets of a vision of how philanthropy ought to be carried out in the near future. They all convey promises to augment and improve philanthropy. Some of these systems support existing practices; but many seek to more dramatically transform the sector. They anticipate a world in which technology shapes and facilitates a qualitative difference in the practice of philanthropy. Yet, while anticipatory in character, these texts claim to be telling a story about a *possible present*. The tools they describe are readily available for purchase, sometimes even for immediate use through the website-as-product itself.

The tensions inherent in these narratives, then, are wrought from this positioning of philanthropy as simultaneously both a future and present. The present is always imperfect, and in need of augmentation and improvement; the anticipated possible present that current tools promise instead manifests as a near future, always just out of reach. It is in these tensions that we argue the coulds, shoulds, and oughts of our many prior interlocutors materialize¹. In reflecting on this temporal tension, we find the concept of a 'design fiction' to be a useful analytic provocation (see [38, 39, 49]). While the technical artifacts on which our cases center do in "fact" exist for purchase and use, we find that the visions of philanthropic IT crafted in their accompanying texts are more aligned with Bleeker's definition of a design fiction. Positioned against a pure reading of something that might be considered a contemporary "science fact"—or a far-out "science fiction" future—a design fiction is "a conflation of design, science fact, and science fiction" [8]. It is a temporal conflation of designed present and future.

The worlds crafted through the texts that we have analyzed the world that philanthropic IT promises to bring about—are far from realistic. They are design fictions, as Bleeker describes: "assemblages of various sorts, part story, part material, part idea-articulating prop, part functional software." They are "puzzles of a sort"—certainly to those people who struggle to successfully adopt them year after year. These texts are "stories that speculate about new, different, distinctive social practices that assemble around and through these objects" [8]. In taking these visions of philanthropic IT—and philanthropy—as design fictions, we ask, as prompted by Bleeker: What are the implied "questions, activities, logics, culture, interactions and practices of the imaginary [philanthropic] worlds in which such a designed object might exist?" [8].

There has been a surge of attention to design fiction within HCI in recent years [10, 32 39, 49]. Yet, to date, most writing on design fictions has explored their usefulness for stretching creativity, opening new speculative spaces for envisioning possible futures. In this paper, we suggest a less optimistic reading—that design fictions also exist counterproductively. Suspending a reading of these philanthropic ICTs as contemporary 'realistic' products, and reading them instead as design fictions, we foreground their provocative, anticipatory, and imaginary dimensions. We interrogate *what future* it is that they are promising to materialize, and reflect on a series of disconnects between these visions of the future and the realities of philanthropic work and IT.

Impossible Futures

Together, these tools envision futures characterized by a set of familiar tropes of computing. They envision a future in which automation and efficiency free up time. They envision a future in which technical innovation necessarily implies social innovation. They envision a future in which technology facilitates continuous growth—in the spread of a message, the size of a cause, and in the financial coffers of organizations-through efficiencies, the amplification of speech via new platforms, improved targeting and tailoring of messages to interests surfaced and made knowable by new forms of data. They envision a future in which bigger and stronger communities are realized through technical capacities for connecting people with each other, with causes, and with information. They envision a future in which *increased* transparency, accountability, and measurement leads to bigger and better impacts. They envision a future in which *philanthropy is more successful* because it is easier to do-good design and convenient tools

¹ Fitting that these words are derived from the past tense conjugation of other verbs, while they themselves inhabit a

space of meaning that concerns obligations to a present or future.

break down barriers to participation. They envision a future characterized by the end of the longstanding social issues in which philanthropy has aimed to intervene—brought about by a new approach, by some innovation that finally harnesses *the transformative power of computing to bring about the change that has eluded prior approaches.*

In isolation, any one aspect of these future visions might appear achievable. Automated birthday emails to donors seem like an easy way to save time without neglecting important relationships. Increased transparency about how money is spent would seem to benefit legitimate organizations and help prevent donors from being swindled by a "fake charity." Yet, within these visions we find numerous elisions of the realities of both philanthropic and systems work. The messy and irreconcilable intersections of these competing promises are most troubling, especially in that they ultimately manifest as imperatives: things an organization must take advantage of to be 'good.'

If one has a volunteer database, then getting a count of the number of clients served in order to respond to a survey from a ratings agency might be a 5-minute exercise in pulling a simple report. The database offers-and can deliver onsaving one from an hour (or longer) exercise in counting the same number from a paper record. Yet, setting up that database requires work in advance. Entering the data requires work in advance. Maintaining the software and the technical infrastructure requires work in advance. Training new employees on how to use the tool requires work in advance. Automation and efficiency reconfigure and relocate the time, place, and practice of work, but do not eliminate it altogether [17]. In CSCW, articulation work [36, 40], the work of maintenance and repair [26], and emotional labor and care work [1, 35] are increasingly acknowledged as part of systems work. Yet, the pervasiveness of these forms of work go unacknowledged in visions of friction-free futures.

Recall from the introduction, the example of a donor upset that her nonprofit did not participate in a new donation system on her grocery store's website. If nonprofits were to participate in every new system for accepting donations, they would need to devote significant time to managing these multiple accounts. With the emergence of every new tool like HandUp, nonprofits find themselves with yet another system to manage and "take advantage" of. The gift cards and crowd funding sites may be easier for the public, but what about for the nonprofit who must now manage gift cards, create compelling video campaigns, and micromanage the spending of a beneficiary? The great irony of HandUp as an "innovative" tool is that it ultimately works through existing social service organizations and through the provision of basic charity. Yet, it creates new processes, new mediators, and new overhead for these organizations. The newness, ultimately, is in the tool used, not the solution itself. The problem framing centered on replacing old remedies with new efficient versions (but ones still about charity) does not address systemic problems in a radically new way. Crucially,

there is no attempt to better identify or target the causes that gave rise to the problem of poverty in the first place. Instead, it is yet another tool of amelioration, chasing symptoms.

An emphasis on growth and expansion seems logical, but subtly neglects the day-to-day work of retaining and nurturing existing supporters and maintaining ongoing donation levels. An emphasis on constant "listening" to constituents' social media conversations, and the triggering of targeted emails neglects any attention to possibilities of information overload. An emphasis on collecting ever more data about constituents—to build a "360° view"—neglects the ways that an overabundance of data can itself be blinding and distracting from one's ability to locate salience.

As new technological opportunities present themselves, nonprofits face new imperatives to take advantage of these opportunities. If a birthday note might be automated, then it appears to cost nothing, and becomes a basic requirement. If reporting data appears "easier" because of more userfriendly and sophisticated databases, then the demand for more reporting appears more reasonable. This vision about leveraging technology in service of more "efficient" philanthropic performance is particularly problematic when it intersects with the simultaneous demand for less overhead. Performance metrics that discount the value of spending money on technical infrastructure investments and administrative costs undermine organizations' abilities to live up to the very reporting that these metrics demand. When ratings agencies like Charity Navigator look to nonprofits to provide ever-more details about their operations, they simultaneously penalize these same organizations for spending resources on anything-like technology-that is not clearly in direct service of their mission. Transparency is lauded as a value without attention to the work it takes to construct other work as visible and measurable (see also [9]).

Moreover, these tools promote the notion that individual donors somehow know how nonprofits should be spending their money. These systems dismiss expertise and undermine possibilities for trust, in suggesting that the public is in a position to rightfully judge which of the projects on the HandUp website are most deserving of their crowdfunded dollars. Per the fiction of CharityNavigator, transparency means that nonprofit work should be boiled down as accurately as possible and also represented as 0, 1, 2, 3, or 4 stars. This fiction neglects the fact that stars cannot represent different types of overhead or qualitatively differentiate between work which is valuable and that which is wasteful.

Meanwhile, terms like community, engagement, support, and movement are being redefined in terms of what is most actionable in a computational way of working. These concepts are simplistically operationalized as a number of initial contacts. Once a 'connection' is made—i.e., a shared interest between organization and volunteer has been identified—the IT system provides no follow-through for the substantive work of maintaining relationships and nurturing communities. The fallacy of mistaking computability for meaningfulness is a particularly dangerous fiction in the systemically-implicated design domain of philanthropy.

What Can HCI Do?

Interrogating these philanthropic visions as design fictions and unpacking the temporal tensions between presents and futures illuminates a series of impossible futures for nonprofit organizations and members of the public. Presented as possible to achieve immediately upon the purchase and adoption of a new technological tool, these stories cannot be realized by users in the sociotechnical contexts in which they live. These design fictions prime users with unrealistic expectations of what computing can do that we argue contributes to a continual sense of inadequacy and leads to a continual state of churn (see also [46]).

As Wong and Mulligan have written, design fictions about close-to-market products can set up anticipatory relationships that foreclose possibilities when they are more narrowly prescriptive of technology use. Such fictions prescribe appropriate ways of enacting work and life with and around that technology, and "signal lessened space and receptiveness for critique and discussion" than the positively understood speculation that is typically associated with design fiction [49].

In this research, we find that some of the problems facing philanthropic IT are likely rooted in disconnects far beyond the interface and moment of interaction. Thus, responding to the ways that IT does not work well in the nonprofit sector requires that we not only suggest changes to the designs of artifacts based on our understandings of how tools are used, but also that we work to change the stories that set the bar. Can we find ways to resist anticipatory regimes? How might we support design that does not rely on "logics of expansion, in which new territories for speculation must be continually found to keep the anticipatory logic moving" [1]?

The temporal tensions surfaced in this research also foreground how essential it is for HCI scholars to recognize the inherent activism of their research and to adopt new vantage points from which to understand technology's unanticipated consequences, particularly as they impact marginalized populations—demographics, geographies, and sectors. This research, then, bolsters arguments about interventionist stances and the moral obligations of researchers that are increasingly being made in the burgeoning body of HCI research aimed at understanding and designing technology for "social good" [3, 14, 24, 25].

If we, as a community, want to be user advocates, then we must find new ways to intervene in the crafting of the technological narratives and in the over-promising of technological interventions. We must to find ways to insert our voices into the broader processes, practices, markets, and decisions that shape the user experience. We must do more than offer critique and feedback at the level of interaction or the site of use, and we must seek out new audiences for our research (see also [25]). The problems that this research surfaces are not rooted in misunderstandings of what users want or need or of their work practices, as much as they are rooted in more pervasive and pernicious fictions about the power of technology. These are not problems that are created by poor engineering decisions; they are bigger picture disconnects between the circuits of technology production and the sites of its impact and experience.

As a discipline, we have long been complicit in narratives of technological progress [31], and this research joins Aylett and Lawson [4] in calling for HCI scholars to take more critical stances on contemporary computing tools. We have an ethical obligation to resist narratives of technological 'quick fixes,' to offer political support for non-use, and to short-circuit the over-simplistic 'design implication' in our own research. It is our responsibility to rearticulate the problems of philanthropy-or any other domain-from alternative perspectives. Simultaneously, we must acknowledge up front that new technologies-new techniques, new practices-will undoubtedly create their own new problems, overheads, and things to work around. Our repositioning of design fictions as potentially harmful rather than progressively speculative highlights opportunities for HCI to intervene by destabilizing the false promises of technology rather than attempting to offer better promises, especially when the implication may be not to design [6]. Through the tools that we design, the research we publish, and the courses we teach, we must convey more realistic presents and more realistic futures that do not overindulge in unbridled optimism.

CONCLUSION

In this paper, we have examined discourses of philanthropic IT to explore the visions they craft about the (near) future of philanthropy. We examine the rhetoric of five philanthropic IT offerings through case studies that explore their understandings and assumptions about philanthropy, and about how, why, and in service of what ends nonprofit organizations could, should, and ought to leverage IT. We examined these visions through the lens of design fictions, demonstrating how they cultivate unrealistic expectations about impossible futures and entail concomitantly unrealistic expectations and imperatives for the nonprofit sector. We argue that HCI scholars have an ethical imperative to unseat unrealistic narratives of technological progress and the technological 'quick fix.' We call for scholars to lend their expertise in rearticulating the problems of philanthropyand other domains-to convey more realistic presents and visions of the future in our research and design.

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TEXTS

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