

Crowd-Operated Gig Markets and Crowdsourcing

INTRODUCTION

In the past several years, researchers have watched new forms of labor, ranging from information work like Amazon Mechanical Turk (AMT) to offline gigs like Uber and TaskRabbit emerge and balloon into industries now worth billions. While workers in these markets point out that the transient “gig work” these markets enable allow them to participate in the market when they might have been unable to do so before, for instance due to medical conditions preventing them from making long-term commitments, or competing obligations such as parenthood or caregiving.

On the other hand, this “gig economy” has been criticized for commoditizing and ultimately marginalizing workers [4]. Efforts have attempted to make these markets more rewarding, or at least more bearable, for workers [3, 7], but we still see no fundamentally differentiated labor markets for workers; virtually all of the existing markets trade one manager for another, maintaining an adversarial role between laborers and their managers.

Workers have faced issues like these for more than a century, but they bear relevance to the HCI community broadly for two major reasons: 1) the features of digital systems allow researchers to have an outside impacts on workers, whereas historically markets have been fractured & untenable, and 2) as researchers of technical systems and social interactions, researchers have a prerogative to attempt to steer systems toward more beneficial outcomes. *researchers, broad impact, etc...*

HYPOTHESIS

I propose to investigate the viability of a technologically-mediated, worker-run market as an alternative to existing systems. I hypothesize that such a market can compete effectively, and that workers and consumers would benefit more, for a number of reasons. For workers, 1) communally determined rules and norms are perceived as, and perhaps are, fairer, and 2) a protocol for labor markets would allow markets to communicate things like worker reputation. Customers, for their parts, would be able to leverage market competition, minimizing predatory pricing models.

BACKGROUND

The most immediate question is why technologically-mediated worker-run markets are so rare. One may have predicted that worker-run markets would emerge inevitably as online systems parallel (and sometimes model) offline settings. Furthermore, the structure of the Internet — a “rhizome”, as Miller and numerous others describe [5] — suggests that communities should be able to form naturally, unencumbered by barriers like geography. Futurists predicted that the Internet would democratize communication, enabling grassroots organization at unprecedented scales.

The empirical research suggests that the reality of this promise is more qualified [7, 8]. Indeed, the factors which stymie community-run digital markets are not technical. Researchers have built on existing markets to experiment with the organization of work; others have implemented labor markets entirely from scratch [1, 6]. The components of gig labor market — such as scheduling, dispatch, & payments — are sufficiently explored that we should consider them “solved problems”.

The challenge of a worker-run market seems to be sociocultural. The emergence, communication, and enforcement of norms add a dimension of complexity to the individual cases of collective action represented by the study of individual events. Engineering instances of collective action is a qualitatively different challenge from fostering a community of ongoing collective action [2].

METHODOLOGY

I intend to develop a worker-run labor market, which the National Domestic Workers Alliance (NDWA) will operate through their innovation arm, the Fair Care Labs. I hope to demonstrate that cooperatively operated digital labor markets can be successful, and that technologically-mediated cooperative labor markets are viable alternatives to markets operated as firms.

The most immediate goal is to implement a system consisting of the technical requirements of gig labor markets described before (factors such as scheduling, dispatch, & payments). This system would resemble a mobile application, similar in appearance to existing labor platforms, but importantly differentiated by affordances for community governance: 1) forums for discourse, 2) voting systems for referendums, and 3) bylaws written and approved by the community approval.

The Fair Care Labs plans to deploy this system in two locales — the San Francisco Bay Area and the Seattle area — in order to allow me to provide high-level guidance and to make course-corrections as necessary. This should ameliorate concerns both about funding the system and sourcing workers; my involvement is the extent to which I will be able to contribute as a researcher.

Using Hardin’s perspective of collective action, distinguishing between “one-shot” and “ongoing” campaigns, we realize it’s necessary to consider how groups sustain collective action over time. Thus, designing ongoing collective action requires skills in system-building, as well as a “nearly anthropological investigation” to engage in the sociocultural questions herein [2]. This describes the type of evaluation involved: a reflection on the ways in which people work and relate with one another, and the techniques we can use as engineers of social systems to guide relationships.

The ethnographic and design work I’ve done at Microsoft Research (MSR), my work at Stanford University (Dynamo [7]), and my background and training as an Anthropologist make me ideally skilled to pursue this area. I have demonstrated that I can build systems, and crucially I have proven experience in the qualitative, nebulous fieldwork necessary for this research.

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