Design Activism for Minimum Wage Crowd Work

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Abstract

Entry-level crowd work is often reported to pay less than minimum wage. While this may be appropriate or even necessary, due to various legal, economic, and pragmatic factors, some Requesters and workers continue to question this status quo. To promote further discussion on the issue, we survey Requesters and workers whether they would support restricting tasks to require minimum wage pay. As a form of *design activism*, we confronted workers with this dilemma directly by posting a dummy Mechanical Turk task which told them that they could not work on it because it paid less than their *local* minimum wage, and we invited their feedback. Strikingly, for those workers expressing an opinion, two-thirds of Indians favored the policy while two-thirds of Americans opposed it. Though a majority of Requesters supported minimum wage pay, only 20% would enforce it. To further empower Requesters, and to ensure that effort or ignorance are not barriers to change, we provide a simple public API[1] to make it easy to find a worker's local minimum wage by his/her IP address. An extended version of this article is available online[2].

1 Introduction

Ross et al. (2010) estimated that nearly 27% of Indian and 14% of American workers were dependent on AMT income for basic needs. Probing workers' *reservation wage* (the smallest amount a worker is willing to accept), Horton and Chilton (2010) found an AMT median value of $1.38/hour. In the US, while federal minimum wage is $7.25/hour (Wikipedia), classification of crowd work as independent contracting excludes it from employment regulation (Felstiner 2010). Moreover, with greatly varying local minimum wages (e.g., only $0.28/hour in India, per Wikipedia) and outsourcing practices long-established, are notions of *equal pay for equal work* simply antiquated in a 21st century, global and digital economy?

While one can enumerate many potential technological, economic, and legal barriers to any proposed change, we might begin first by simply imagining and debating ideas for what a better model of paid crowd work might look like (Kittur et al. 2013). To seed such community *ideation*, let us begin by imagining a reality in which paid crowd work were required to compensate workers according to local minimum wage laws. Would any Requesters support such a policy? Would any workers support being blocked from tasks that did not meet this wage restriction in their local region? Would workers in different regions have different views?

As inspiration, Turkopticon (Irani and Silberman 2013)'s *design activism* both provided functional enhancements on AMT, helping mitigate power disparities, but also provoked discussion and disrupt common rhetoric of technocentric optimism surrounding crowd-powered systems. In this work, we survey workers and Requesters, and to be more provocative, we created a dummy Mechanical Turk task in which workers were told after accepting the task that they could not work on it because it paid below the worker's *local* minimum wage, at which point we invited their feedback (and offered payment for feedback in lieu of the task). For workers expressing an opinion, two-thirds of Indians favored the policy while two-thirds of Americans opposed it. Though a majority of Requesters supported minimum wage pay, only 20% reported willingness to enforce it.

To empower any Requesters favoring the policy, and to further ensure effort or ignorance are not barriers to change, we provide a simple public API to support easily finding each worker's local minimum wage by IP address. Just as Apple iTunes made it easier for people to buy music legally, can technological convenience yield higher pay on AMT?

2 Methodology

An unpaid AMT Requester survey received responses summarized in Table 2. Our Requester Survey asked:

1. If you are a requester on a crowd-sourcing platform,would you prefer to reward the worker as per the minimum wage norms of the country the worker belongs to? (Yes/No/Neutral)
2. If yes, why? Would you expect quality results if you did so?
3. If yes, would you block the workers whose minimum wage is greater than what you can offer per person? Why or why not?

We also put workers into a real-life situation in which this policy is enforced. We created attractive tasks on MTurk which ask users to go to a particular link/website to gather certain information, but the link actually points to our own website where we lookup the worker's geographic region via IP address using open source GeoIP (`freegeoip.net`).

In a real implementation, the worker could be restricted from working on the task if it did not pay at least the local

[1] `github.com/akash-mankar/DesignActivism`

[2] `arxiv.org/abs/1706.10097`

minimum wage. Here, we simply told every worker that the task paid too little for them to work on it.

Our website displayed an apology, explained the policy to workers, and then invited their feedback, offering one-time payment for that feedback instead. Workers who provided feedback were provided payment in lieu of the actual task.

Workers were required to have previously completed 100 HITs in order to access our tasks. We did not require any prior approval rate. Inspired by *Turkalytics* (Heymann and Garcia-Molina 2011), we also used IP tracking to check if we received visits from the same IP address for different worker IDs, or the same worker ID for different IP addresses. Beyond fraud, this might arise in benign settings like an internet cafe with dynamic IP addressing. We detected no such occurrence in practice. A technological hurdle we could imagine in practice with such a policy is IP-spoofing: if pay is region dependent, one might try to change one's IP to appear to be located in a higher-paying region.

3 Results

While paid AMT survey responses show workers (regions unknown) as evenly divided on the policy, feedback from our AMT dummy task was quite different. 241 of 301 US workers who visited our website left feedback. We received far fewer Indian visits to our website: 104, with 62 responses. Far more strikingly, the distribution of opinions between regions diametrically-opposed, with two-thirds of Indian workers favoring the policy, while two-thirds of such American workers oppose the policy.

Table 1: Opposing US and India worker responses.

Region	Total	Yes		No		Neutral	
Paid Survey on Mechanical Turk							
All	73	32	44%	33	45%	8	11%
Feedback on Mechanical Turk Posted Task							
USA	241	55	**23%**	121	**50%**	65	27%
India	63	31	**49%**	15	**24%**	17	27%
All	304	86	28%	136	45%	82	27%
Combined Results							
All	377	118	31%	169	45%	90	24%

We received 88 Requester responses (82 from AMT, and only 6 from both TurkerNation and TurkerReddit). Across all responses, a surprising majority 58% of Requesters report favoring minimum wage payment, with 39% opposed (Question 1). Of those in favor, 71% expected better quality work would result from such a payment policy, with only 1% opposed (Question 2). Despite this, only 20% of Requesters indicated willingness to block workers from performing tasks that would underpay vs. local minimum wage laws: 35% opposed the policy, while a large 45% of Requesters expressed neutrality on the question.

We organized textual feedback received into emergent categories to identify recurring themes and their relative distributions. The most common reason for a neutral opinion for both Requesters and workers was principally that their opinion depends on the type of task at question.

Table 2: Results of Requester Surveys (all unpaid).

Question	Total	Yes		No		Neutral	
1	82	49	60%	31	38%	2	2%
2	49	34	69%	1	2%	14	29%
3	49	10	20%	16	33%	23	47%

Table 3: Classification of worker and Requester opinions

Workers		
	In Favor of the Policy	***118***
1	Ethically Fair	42
2	Legally Compliant	8
3	Help them find higher paying work more quickly	8
4	Encourages them to do better work	4
5	Will help meet their basic end needs	9
6	Miscellaneous	47
	Against the Policy	***169***
1	Ethically Unfair (performance/merit not location and its minimum wage)	11
2	Opportunities reduce	18
3	It is not a MTurk/crowdsourcing suitable policy	19
4	Not a source of basic income	14
5	Workers capable of making a conscious decision	71
6	Not here for money only/Like working on tasks	9
7	Miscellaneous	27

Requesters		
	In Favor of the Policy	***51***
1	Incentive for quality work	36
2	Ethically fair	8
3	Attracts more workers	6
4	Miscellaneous	1
	Against the Policy	***34***
1	Not a MTurk/crowdsourcing suitable policy	5
2	Ethically unfair	10
3	Low skill/low effort, not worth minimum wage	8
4	Cannot afford or lack of funding	2
5	Do not want to spend (more productive / business)	2
6	Miscellaneous	7

The extended version of this paper available online[2] includes textual feedback from Requester and worker surveys.

4 Empowering Requesters

As noted earlier, most Requester responses supported the minimum wage policy. To empower such Requesters, we created a simple open source Python API[1] to implement this policy in practice. Given the worker's IP address, the Requester can first lookup the worker's region via the aforementioned open-source GeoIP library. Next, the Requester uses our API to automatically look up the local minimum wage for that region, using rates from Wikipedia.

We hope our work helps to stimulate further ethical discussion regarding minimum wage for online microwork. The responses that we received reflect interesting patterns of thought for engaging dialog and informing researchers and others seeking to imagine alternative future designs for ethical and sustainable crowdsourcing.

Acknowledgements. We thank our talented crowd workers, without which our study would not be possible. We also

thank the anonymous reviewers for their valuable feedback. This study was supported in part by National Science Foundation grant No. 1253413 and IMLS grant RE-04-13-0042-13. Any opinions, findings, and conclusions or recommendations expressed by the authors are entirely their own and do not represent those of the sponsoring agencies.

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