## INTRODUCTION

One persistent source of frustration in crowdsourcing has been how to make more complex work viable. A great deal of research has gone into various processes and work–flows that would facilitate complex outcomes, but much of this work presupposes that workers are generally unskilled. Kittur et al. asked a number of years ago whether crowd work would ever become more than it was at the time — "largely a dead—end job" [1] — and thus far the answer appears, reluctantly, to be"no".

[al2: Notes to do:

- 1. challenges for workers
  - (a) new to the platform
  - (b) new to any unfamiliar requester
- 2. challenges for requesters
  - (a) complex qualifications are an unknown challenge (e.g. "someone who's a good image tagger who also knows Tamil"?)
  - (b) confidence in existing simple reputation systems is already poor; at best, approval rating of past tasks is not very sensitive (i.e. lots of workers with 99% approval rates — says nothing about specific approval rates of tagging or translating or whatever)

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**crowd work has a reputation problem**; on-demand work has grown significantly; task diversity is growing; new platforms continue to emerge; trust still a problem

**this is a cold start problem**; workers new to the platform are stuck slogging it; workers new to a requester stuck too.

existing platforms aren't great at this stuff; Mechanical Turk

## clever solution: résumés for on-demand workers;

in "conventional" work, the problem of signaling a worker's quality was solved by using past worker performance as a proxy for future performance

on-demand work platforms have tried to do this with approval and rating systems, but they're generally too vague to be useful

conventional work résumés usually allow the worker to emphasize and omit information that's not relevant — what if we facilitated that?

we built a system that collected data from workers' profiles on online crowdsourcing platforms (first AMT, then others), and parsed that data to present more meaningful analytic data on things like

- the nature of the task; objective (i.e. factually based and evaluable) versus subjective (e.g. survey [al2: maybe also object labeling?])
- 2. the type of requester; academic versus industry
- 3. others

we also built a proof-of-concept qualifications management system abstracted from both our worker profile system and the work platform itself (to explore the potential to abstract worker qualifications and credentials from the system itself, allowing other parties to specialize in this task)

we evaluated this system from two perspectives:

- 1. did requesters who used this system find that the worker data better-informed their qualifications management and worker solicitation? in other words, was the output of the work more reliably accurate when they relied on the analytic data that we provided versus the coarse approval/rejection rating?
- 2. did *workers* benefit from having high level data providing some insight into their work trends? did this lead them to better work more quickly? did they take a more active role in the management of their reputation / "worker profile" / résumé?

we also explored whether the externalized worker qualification system worked effectively, and considered the potential advantages and disadvantages of a set of decoupled systems rather than an integrated one (market, qualifications assessment system, payment platform, etc...).

## **DEAD KITTENS**

[al2: this is getting a little argumentative, yeah? I want this to get in the direction of "Things aren't going the way they need to in order for crowd work to be good for people."] Today's on-demand labor markets don't seem to be driving toward a bright future for workers. At one end of the spectrum, workers are treated as interchangeable cogs whose purposes are as backdrops upon which to project rubrics, workflows, and processes [3]. In this space, workers' lack of expertise is precisely what makes this form of labor compelling — as an opportunity to show that, when arranged and managed correctly, "...non-experts can achieve better coverage and latency than a professional..." [2]. At the other end of the spectrum, workers in on-demand labor markets are seen as the walking dead — human laborers who will "satisfice" until artificially intelligent agents can take over [al2: [cite Kalanick being Kalanick]].