The Future of Crowd Work

A. Kittur et al.
Crowdsourcing & crowd work

- Volunteering vs paid work
- Micro labor vs long tasks

Study focuses on paid online crowdwork
Paid Crowd Work ≠ Mechanical Turk!

And More!
JobBoy, microWorkers, MiniFreelance, MiniJobz, MinuteWorkers, MyEasyTask, OpTask, ShortTask, SimpleWorkers

Matt Lease<ml@utexas.edu>

D. Vakharia et M. Lease, "Beyond Mechanical Turk: An Analysis of Paid Crowd Work Platforms"
Crowd work

Socio-technical work system:

Performance of **online tasks** by **crowd workers** financially compensated by **requesters**
• Almost any job has portions to be performed by crowdwork
• Crowd work will expand, many opportunities:
  towards low cost and exploitive labor?
“Can we foresee a future crowd workplace in which we would want our children to participate?”

Crowd work discussion from a longer-term perspective
<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible workforce</td>
<td>Low pay (AmazonMT avg. 2$/hour)</td>
</tr>
<tr>
<td>Alleviate human resources challenges</td>
<td>No worker benefits or protections</td>
</tr>
<tr>
<td>New income opportunities</td>
<td>Potential fraudulent uses</td>
</tr>
<tr>
<td>Social mobility</td>
<td>Over-division of labour</td>
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</tbody>
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New form of **Taylorism?**
A framework for the (+)future of crowd work

Organizational behavior <-> Distributed computing

“While organization science has been built slowly based on observation, the proliferation of crowd work makes large-scale organizational experiments comparing distinct management strategies and task designs possible.”

12 research directions
The Future of Crowd Work Processes

• **Workflow**: design to support complex tasks dependencies

• **Task Assignment**: coordinating pools of workers

• **Hierarchy**: efficient management strategies

• **Realtime Crowd Work**: create *flashcrowds*

• **Synchronous Collaboration**: rather than independent work

• **Quality Control**: major issue
The Future of Crowd *Computation*

- **Crowd Guiding AIs**: improving machine capabilities
- **AIs Guiding Crowds**: predict and assist needed expertise
- **Crowdsourcing Platforms**: drive novel designs
The Future of Crowd Workers

• **Job Design**: organizational performance and worker satisfaction

• **Reputation and Credentials**: better rankings

• **Motivation and Rewards**: consider the rich diversity of the motives
Next Steps

• Create Career Ladders:
  [motivation, job design, reputation, hierarchy]

• Improve Task Design through Better Communication:
  [quality control, job design, task assignment, realtime c.w., synchronous collaboration, platform]

• Facilitate Learning:
  [quality control, AIs guiding crowds, crowds guiding AIs, task assignment, reputation and credentials, platform]
Proposed framework for future crowd work processes to support complex and interdependent work
task decomposition

platform

motivation

job design

hierarchy

reputation

task assignment

collaboration

real-time work

quality assurance

crowds ↔ AI

OUTPUT