Ethnographic Studies of Turkers

Benjamin V. Hanrahan, Pennsylvania State University

David Martin, Xerox Research Centre Europe

Jacki O'Neill, Microsoft Research India

Neha Gupta, University of Nottingham

General Research Outlook

- Consequences of research and technology on people

- Giving a voice to workers

- Representing the hidden complexities of work

Goals

- Frame Amazon Mechanical Turk (AMT) as a workplace

- Highlight workers' concerns and issues, in their voice

What is Amazon Mechanical Turk?

Framing AMT

- Proprietary, digitally mediated workplace

- Stakeholder structure is becoming more common

  - Platform Owner (Amazon)

  - Work Provider (Requesters)

  - Worker (Turkers)

Digitally Mediated Workplace

- AMT replaces relationship between the worker and employer

- Alters the contractual relationship between workers and employers and reduces accountability

- Tension between transparency and opaqueness

Turkers are Workers

Remuneration

- Many Turkers use AMT as a safety net

- Turkers orient towards the US minimum wage ($15,000 per annum)

- They consider $4-6 per hour too low

- Set goals for themselves based on money (e.g. $10 a day)

Job Satisfaction

- Doing HITs that are entertaining is better than not

- They will adjust their expectations for pay based on several factors

    - Fun/Pleasant

    - Quality of the Requester

Relating to Requesters

- Turkers relate to requesters as employers

- Most of the discussion online is about requesters

- With a particular eye towards being fair and courteous

- Turkers try to understand Requester issues

Workplace Ethics

- There are undoubtably some 'bad apples'

- Get what you pay for, cheap HITs can fall prey to cheats / crooks

- Turkers accept responsibility

What is the Work of Turk?

Features of Turking

- Workers value independence and flexibility

- The Turker has to be flexible to the rhythms of work on turk

- Turkers have independence from individual employers, not the market, over which they have little control

- A mix of independence and powerlessness

Invisible Work

- Work products are invisible to consumers

- Workers are abstracted as processing units in the interface

- The work to make turk work is invisible and unpaid

Work Products are Invisible

Workers are Invisible

Show my Workers by: Lifetime   Last 30 days   Last 7 days

Workers		
Worker ID ▲	**Lifetime Approval Rate for Your HITs**	**Block Status**
A15PUZKRWJH0EY	100% (2/2)	Never Blocked
A1A0ERQ81JGNKT	100% (1/1)	Never Blocked
A1IYFXLF8HPO0G	100% (1/1)	Never Blocked
A1MRX2GTR1SBDH	100% (1/1)	Never Blocked
A23XNUL0HX3OLI	100% (1/1)	Never Blocked
A248P03SBIGVNH	100% (1/1)	Never Blocked
A2O5OJXCUFQ3FV	100% (1/1)	Never Blocked
A35BQPABKN4Q8C	100% (1/1)	Never Blocked
A3CIN7QGB3XJI9	100% (1/1)	Never Blocked
A3QY0GDU9G1YVE	100% (1/1)	Never Blocked
A3UIDFZ7IUOTUO	0% (0/1)	Never Blocked

Work Practices are Invisible

Consequence

- Assume that workers are turking for fun

- It is not 'real' work

- Creates a 'disposable' mindset

AMT Interaction with Invisibility

- The evolution of functionality in AMT has disproportionately addressed requester concerns

- This magnifies the inherent power imbalance between employer / worker

- Salient example of what can happen when the platform maintainer is a user

Requester Interface

Requester Interface

New Project   New Batch with an Existing Project   Create HITs individually

Your New Project

Categorization Project

Choose Categories

Provide Instructions

Upload Data File

Preview

Checkout

The Categorization App makes it easy to get fast, accurate results to your multiple choice questions.

Here's how it works:

1. You provide your categories, instructions, and data.
2. We recommend a reward to pay Workers based on similar work on Mechanical Turk.
3. Only Master Workers who have demonstrated accuracy in Categorization can complete your tasks.
4. Work is automatically approved quickly so Workers stay motivated.
5. You receive an email telling you how to pick up the results when your project is complete.

Create a Categorization Project

Example Categorization Questions

What type of business is this ?

Bank of America

◉ Financial Institute
○ Retailer
○ Restaurant
○ Other

Which fruit group does this item belong to?

○ Mixed fruits
○ Berries
◉ Melons
○ 100% Fruit juice

Turker Interface

Black box

- Hard to know what the policies are for workers

- Master's certificate

  - The 'golden ticket' myth

Reputation, Reputation, Reputation

- Reputation management is a huge part of the work

- Sacrifice earnings to maintain reputation

- Roughly three bands of workers

- Large fear is being blocked

Collaboration

- Making sense of the market

  - Assessing requesters

  - Sorting through HITs

- Writing and distributing plugins

What is AMT?

What to do?

Crowd Workers are People

- Crowdsourcing brings many legitimate benefits to technologists, businesses, and consumers

- Deskilling and labor arbitrage

- Remember to bring some of these benefits to the worker, they are more than just a resource

Research directions

- Support relationships between organizations and their workers

- Avoid abstracting the people out of the design of a system

- Leverage the people behind crowdsourcing, not just having them train their algorithmic replacements