Human-Computer Interaction Crowdsourcing Professor Bilge Mutlu

Today's Agenda

- >> Coronavirus Reminder
- >> Topic overview: Crowdsourcing
- » Discussion
- >> Project Activity: Q&A

What is crowdsourcing?

Definition: Crowdsourcing is a sourcing model in which individuals or organizations obtain goods and services, including ideas and finances, from a large, relatively open and often rapidly-evolving group of internet users; it divides work between participants to achieve a cumulative result.¹

¹Wikipedia

What are characteristics of crowdsourcing?

- >> Other people doing work for you
- >> Work is structure to facilitate efficiency and reaching expertise
 - >> Tasks can be outsourced at any scale—"Microtasks"
 - >> Workers can be found instantaneously, e.g., within seconds
 - » Access to worker quality and expertise

Where does crowdsourcing come from?

Milestone 1. 13th century, <u>Hugh of Saint-Cher, O.P.</u>, coordinated monks to index scripture.

Milestone 2. Longitude act of 1714 offered prize money toanyone who could determine the longitude of a ship to avoid accidents. Several examples of reward-based crowdwork follow.

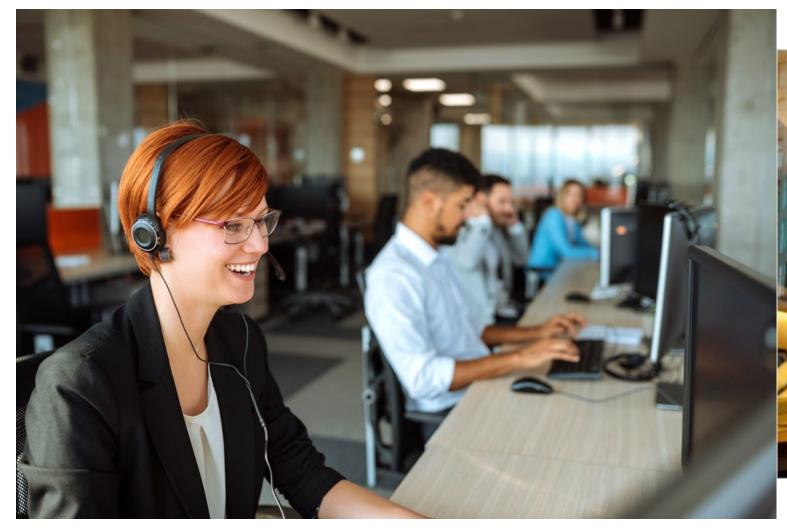
Milestone 3. In 1794, <u>Gaspard de Prony</u> devised microtasks of addition and substaction for 80 unemployed heirdressers to develop logarithmic and trigonometric tables.²

² Andro, 2018, <u>Digital libraries and crowdsourcing</u>

How is crowdsourcing different from contract work?

Similar, but different:

- >> Contracting is handled by a 3rd party
- » Contracting, tasking, and work happens instantaneously
- >> More competitive, lower-cost, instantaneous





³Image source: <u>Left</u>, <u>Right</u>

Example Markets

Design, product development, datawork, reputation management, transportation, errands

- >> Online
 - Design 99 Designs
 - Datawork Amazon's Mechanical Turk; CrowdFlower
 - Reputation Fiverr
- >> Local
 - Errands TaskRabbit, Taskr
 - Taxi Uber, Lyft
- >> Flash Teams
 - Product development Quirky, OpenInnovation,

How 99designs works





Where is crowdsourcing going?

- » Scaffold organizations that bring experts together to explore product/service ideas—"Flash teams"
 - >> E.g.: Quirky, OpenIdeo, Innocentive



Discussion Questions

- >> How is crowdsourcing different from CSCW?
- » What are examples you have found?
- >> What do you think are technological implications?
- >> What do you think are organizational implications?
- >> What do you think are societal implications?
- >> ...