Crowd Economy

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OUTLINE

1. CROWDSOURCING

2. EVERYONE IS AN ARTIST

3. MECHANICAL TURKS

4. CONCLUSION
The term crowdsourcing indicates the act of outsourcing tasks, traditionally performed by an employee or contractor, to a large group of people (a crowd): the trend of leveraging the mass collaboration enabled by Web 2.0 technologies to achieve business goals. Crowdsourcing constituted a new form of corporate outsourcing to largely amateur pools of “volunteer labor that create content, solve problems, and even do corporate R & D.”  

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1 Howe, 2006
ESP GAMES

“5000 people playing simultaneously an ESP game on image recognition can label all images on google in 30 days. Individual games in Yahoo! and MSN average over 5000 players at a time.”

To address the problem of creating difficult metadata, ESP uses the computational power of humans to perform a task that computers cannot yet do by packaging the task as a “game”.

\[v^2\text{von Ahn, 2006}\]
Massive Multiplayer Online RPG

- MMORPG
  - World of Warcraft
  - Second Life
  - OpenSIM
  - etc.
- Virtual reality architecture
- Virtual miners
When crowdsourcing EDA, complex problems can be broken up into modules where the I/O of logic circuits is tested against combinations computed by humans.$^3$

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$^3$Romero, 2009
Interested in the liberation of the means of production, Berthold Brecht elaborated the concept of functional transformation (*Umfunktionierung*) for the transformation of the forms and instruments of production [by a progressive intelligentsia].

[...] He was the first to formulate for intellectuals this far-reaching demand: do not simply transmit the apparatus of production without simultaneously changing it to the maximum extent possible [in the direction of socialism].

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4 Benjamin, 1934
USER LABOR MARKUP

- ULML
  An open data structure (based on XML syntax), to outline the metrics of user participation in social web services. Its aim is to construct criteria and context for determining the value of user labor, to constitute a monetized asset not just for the service provider but also for the user herself.\textsuperscript{5}

- Activity Streams
  A format for syndicating social activities around the web, adopted by Facebook, MySpace, Windows Live, Google Buzz, BBC, Opera, TypePad, Gowalla, Gnip, Superfeedr, YIID, and many others.

\textsuperscript{5}Burak Arikan and Engin Erdogan, 2008
by Peter Edmunds
Each week, SwarmSketch randomly chooses a popular internet search term, which becomes the sketch subject for the week, with visitors contributing to a group illustration
by Harrell Fletcher and Miranda July

Easy numbered assignments for anyone—artist or non-artist—to complete and upload his or her results (known as “reports”).
Found Magazine

by Davy Rothbart

Reprinting anonymous “love letters, birthday cards, kids’ homework, to-do lists, ticket stubs, poetry on napkins, doodles—anything that gives a glimpse into someone else’s life.”
by Allison Wiese
Based on the 1977 Museum of Modern Art Artists’ Cookbook by Madeleine Conway and Nancy Kirk, and composed of free “recipes” submitted by contemporary artists
by Aaron Koblin
A collection of 10,000 sheep made by workers on Amazon’s Mechanical Turk. Workers were paid 0.02 ($USD) to “draw a sheep facing to the left.” Animations of each sheep’s creation may be viewed at TheSheepMarket.com.
On an autumn day in 1769, a Hungarian nobleman, Wolfgang von Kempelen, was summoned to witness a conjuring show at the imperial court of Maria Theresa, empress of Austria-Hungary. So unimpressed was Kempelen by what he saw that he impetuously declared that he could do better himself. The following year Kempelen presented a mechanic man sitting behing a table: fashioned from wood, powered by clockwork, and dressed in a Turkish costume, it was capable of playing chess.
“Yet the question of its modus operandi is still undetermined. Nothing has been written on this topic which can be considered as decisive — and accordingly we find every where men of mechanical genius, of great general acuteness, and discriminative understanding, who make no scruple in pronouncing the Automaton a pure machine, unconnected with human agency in its movements, and consequently, beyond all comparison, the most astonishing of the inventions of mankind.”

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6 Edgar Allan Poe, 1836, Maelzel’s Chess-Player
Amazon’s M-Turks

- artificial artificial life
- humans are behind pseudo-automation
- repetitive tasks that will be automated in future
Increasingly flexible work schemes move people to develop career portfolios and increase the *resilience* of individual employment to withstand changes in the labour market.

Business companies invest more in attracting than in retaining talent and skills: they seek the speed, creativity and volume of large and diverse populations to develop and to consume new formats.
FUTURE DIRECTIONS

- Monetary systems
- Public Domain
- Hermeneutics
- Praxeology
- Patents

Western civilization has been characterized by three foremost taboos: sex, death and money. For centuries, they were topics that were considered inappropriate to bring up in “polite company”. The sexual revolution of the 1960s brought the first one into the open. The AIDS epidemic of the 1980s has made us face death, combined with sex, and talk about it even with our youngsters. This time proposes to tackle the last taboo: money.\(^7\)

References

- Benjamin, W. (1934) “The Author as Producer”
- Poe, E.A. (1836) “Maelzel’s Chess-Player”