

IN4MATX 153: CSCW

**Class 12:
Governance**

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TA Dennis Wang
Reader Weijie Du

Announcements

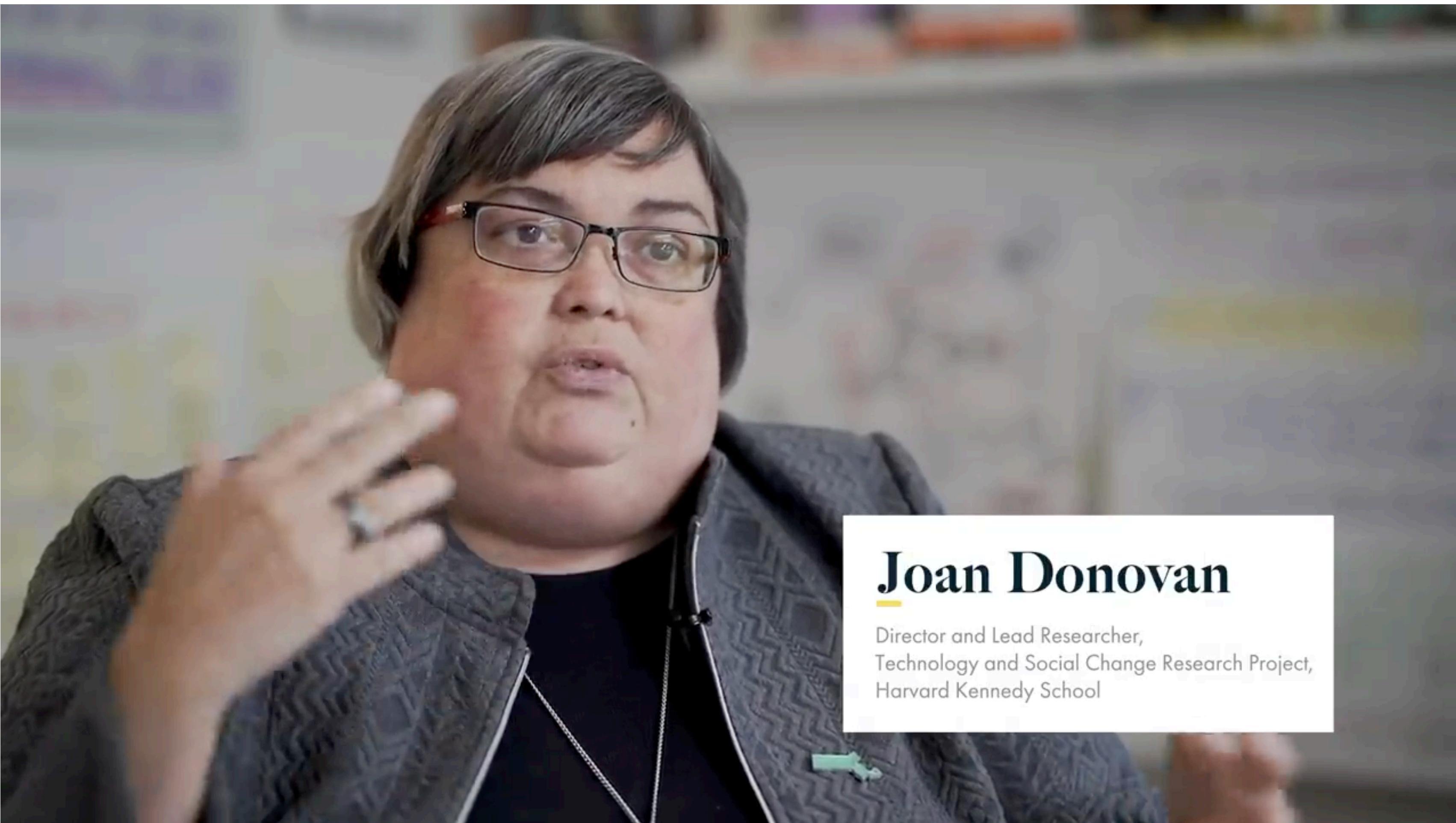
- More announcements at the end of class today

Today's goals

By the end of today, you should be able to...

- Articulate types of decisions that online communities often have to make regarding how they are run and what they do
- Describe the importance of governance in online communities, particularly in groups aiming for collective action
- Differentiate approaches to decision-making among peers in online spaces

Models for Governance



<https://www.youtube.com/watch?v=3Hh2m5AKUvM>

The new governors

- In 153, we're arguing that social platforms shape our interactions with each other
- So, the decisions that shape these interactions are impactful
- Platforms are “the new governors”, but they don’t function like any other democratic government

Klonick, K. (2017). The new governors: The people, rules, and processes governing online speech. Harv. L. Rev., 131, 1598.

THE NEW GOVERNORS: THE PEOPLE, RULES, AND PROCESSES GOVERNING ONLINE SPEECH

Kate Klonick

INTRODUCTION	1599
I. SECTION 230, THE FIRST AMENDMENT, AND THE BEGINNINGS OF INTERMEDIARY SELF-REGULATION	1603
A. <i>History and Development of § 230</i>	1604
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1. <i>Free Speech Norms</i>	1618
2. <i>Government Request and Collateral Censorship Concerns</i>	1622
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1. <i>Corporate Responsibility and Identity</i>	1626
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Mark Zuckerberg on Governance

marketplace of ideas. “The core job of what we do is building products that help people connect and communicate,” he said. “It’s actually quite different from the work of governing a community.” He hoped to separate

With its size, Facebook has amassed outsized powers. “In a lot of ways Facebook is more like a government than a traditional company,” Zuckerberg has said. “We have this large community of people, and more than other technology companies we’re really setting policies.”

<https://www.newyorker.com/tech/annals-of-technology/inside-the-making-of-facebooks-supreme-court>

<https://www.theguardian.com/technology/2017/sep/19/facebook-s-war-on-free-will>

A failed angle: autocracy

- Early internet pioneers argued that it shouldn't be governed, and the early vibe was counterculture and libertarian
- But, most the software underlying communities derives from a roles-and-permissions model in UNIX
 - Mods & administrators: roles that have specific powers
- What if you wanted to have more participatory governance?
 - (And even if you don't, many online communities need to govern themselves regardless)

https://en.wikipedia.org/wiki/A_Declaration_of_the_Independence_of_Cyberspace

Another failed angle: open participation

- “I joined the network shortly before the Omidyars [...] pledged to contribute an initial \$25,000 to a group or groups chosen by the community.
- *Thus began a massive meta thrash.* [...] Probably around 1000 people checked out the conversation thread, around 200 participated in the conversation, and around 25 people contributed the majority of the posts, which ended up numbering in the thousands.
- Attempts at consensus continued to fail on minority objections. My contributions to the conversation thread consisted largely of unheeded warnings that without a clear decision-making procedure, *this conversation was doomed to be an infinite meta rathole.*”

**No governance is still governance. And
it's bad governance**

Governance closer to home

- Say that I want to suggest a change to the curriculum
 - “IN4MATX 153 should be a requirement for all students on campus!”
- What might I do?
 - Email some other professors, try to get approval
- What might happen?
 - “But wait, I think that [insert my class] should be a requirement for all students!”
 - Conversation stalls... too many competing priorities

Outline

- Defining decision-making
- Governance
- Decision-making

What sorts of decisions might online groups need to make?

What decisions do online groups make?

- Peer production (Wikipedia, Open Source): what should we invest our time and energy into?
- Social movements: how should we make progress towards our causes?
- Any forum or interest group: what content is allowed, and what is not?
- Any platform: who is allowed, and who is not?

Peer production decisions

- WikiProjects: Wikipedia editors get together and decide on a task to collectively focus on
 - Examples: standardizing notation for math articles, improving coverage of topics and people relevant to India
- “A WikiProject is a fundamentally social construct”

What is a WikiProject?

See also: [FAQs about WikiProjects](#)

A [WikiProject](#) is a [group of editors](#) interested in collaborating on a specific topic within Wikipedia. A WikiProject is a group of people, not a set of pages, a subject area, a list of tasks, or a category. The pages of a WikiProject serve as a central place for coordination, discussion, and organization of the group's activities related to the specific topic. WikiProject pages may be used to develop criteria, maintain various collaborative processes, keep track of work that needs to be done, and act as a forum where relevant issues may be discussed.

A WikiProject may also help build ties between Wikipedians interested in a topic, and the broader community interested in that topic: establishing partnerships, mentoring new Wikipedians, etc. In this respect, the role of a WikiProject may overlap with the role of a [Wikimedia chapter](#), [thematic organization](#), or [user group](#).

A WikiProject is fundamentally a *social construct*: its success depends on its ability to function as a cohesive group of editors working towards a common goal. Much of the work that participants do to sustain a successful WikiProject (quality assessment, peer review, coordination of volunteer editors, etc.) can be tedious, unrewarding, and unappreciated. To be effective, a WikiProject must foster an *esprit de corps* among its participants. When group cohesion is maintained—where, in other words, project participants are willing to share in the less exciting work—a WikiProject can muster the energy and direction to produce excellent articles systematically rather than incidentally.

Social movement decisions

- Problem: social movements, which often organize in online communities, tend to have a range of opinions on what should be done, and how
- Dynamo: a platform driving decision-making around what problem a group of gig workers could improve in their platform, and how
- Resulted in a letter campaign to Jeff Bezos, and creation of guidelines for what makes a good request

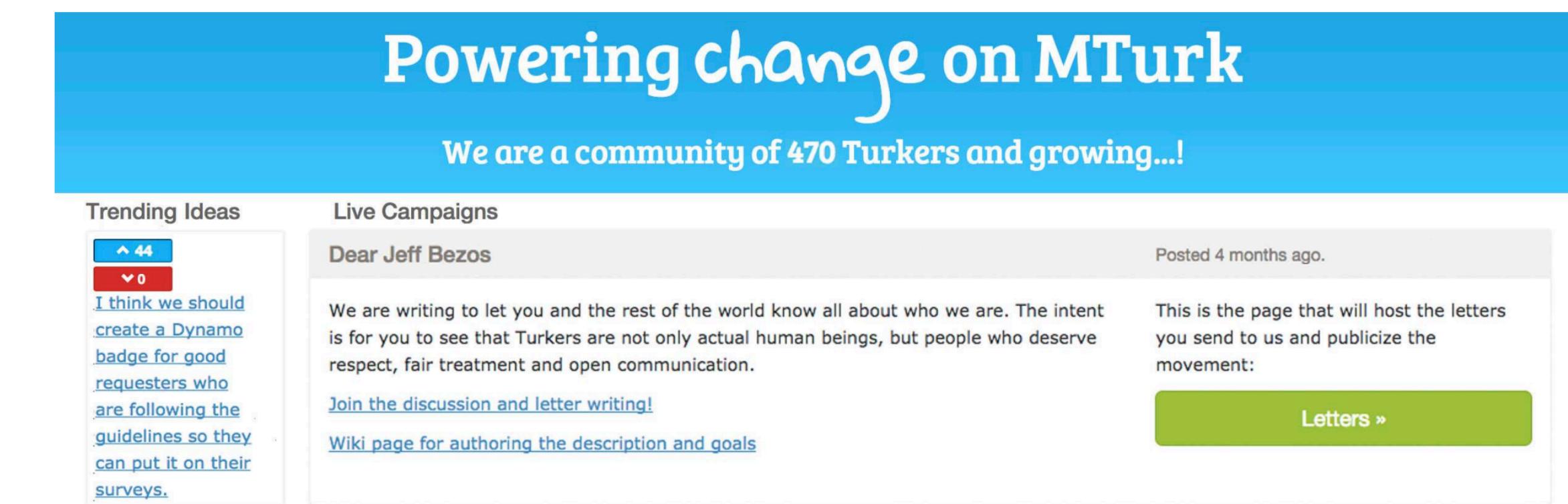


Figure 1. Dynamo is a collective action platform for Amazon Mechanical Turk workers. It has been used to author guidelines for ethical requester behavior, a letter campaign to Amazon CEO Jeff Bezos, and twenty other efforts.

Salehi, N., Irani, L. C., Bernstein, M. S., Alkhatib, A., Ogbe, E., Milland, K., & Clickhappier. (2015, April). We are dynamo: Overcoming stalling and friction in collective action for crowd workers. In Proceedings of the 33rd annual ACM conference on human factors in computing systems (pp. 1621-1630).

Social movement decisions

- The “public sphere” tends to have two types of discourse
- Discursive: aiming to shape public opinion
- Tactical: aiming to drive action
- Movements can be a mix of both

Habermas, J. (2020). The public sphere: An encyclopedia article. In Critical theory and society (pp. 136-142). Routledge.

Content decisions

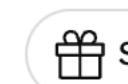
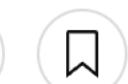
- Online communities have rules over what content is allowed
- Some rules exist across a lot of platforms
 - No inflammatory language, no bigotry
- Others are more community-specific
 - No naming of TAs
 - How did UCI's subreddit decide on these rules?

RULES	
1	No Inflammatory Language or Harassment Treat people with respect and argue in good faith.
2	No bigotry No bigotry, sexism, racism, homophobia, xenophobia, etc.
3	No witch hunts No posting information about a person or group in a way that encourages a witch hunt, doxxing, or harassment of anyone.
4	No naming TAs, students, and staff Naming others without the explicit consent of the individual in your post will result in a ban. Staff and faculty are a gray area and will be subject to moderator judgment. Photos of lost items such as IDs should be censored.
5	No illegal activities/academic violations This includes requests for pirated versions of textbooks and homework services.
6	Please read the FAQ before posting about lost items Hide sensitive information on lost items https://tinyurl.com/y3dqwc5q
7	No non-UCI affiliated promotions Posts seeking to use UCI students and faculty as a resource will be removed. This includes sale of goods, promotion of playlists, youtube channels, tutoring services, commissions, etc. UCI affiliated activities such as clubs and events, as well as survey requests from UCI members are allowed.

Membership decisions

- Communities have the power to decide on rules for who can join, or ban members who violate the community's rules
- Decision-making gets complicated when platforms have to make decisions about public figures

Trump's banishment from Facebook and Twitter: A timeline.

 Share full article  

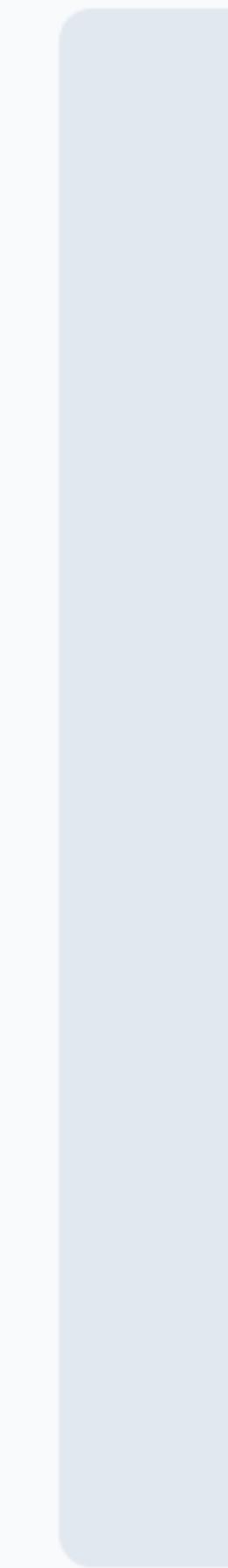


Former President Donald J. Trump at the White House in 2020. Doug Mills/The New York Times

Discuss: how should platforms decide whether a person, or type of content, is allowed?

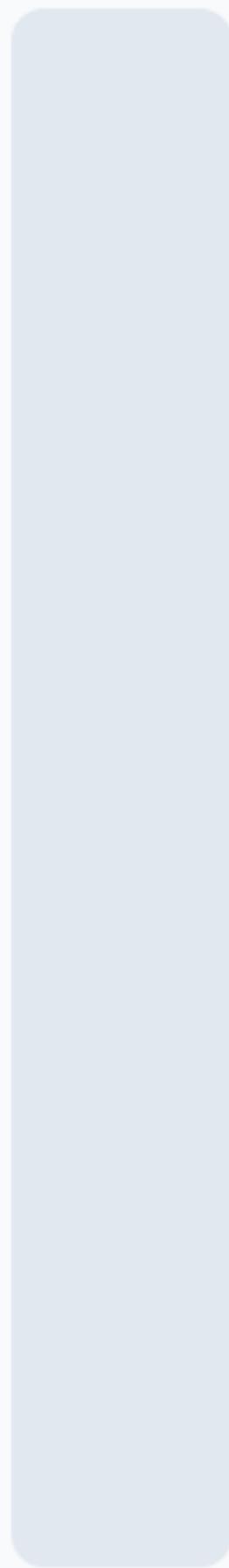
Should platforms be able to ban public figures?

0%



Yes

0%



No

Governance

Ostrom: governing commons

- When a resource is shared, the most effective groups require that “those affected by the rules can participate in modifying the rules”
- In other words, successful collective decision-making requires:
 - Operational and collective rules, defining what we’re allowed to do
 - Constitutional rules, the meta rules of how we change our governance

Ostrom, E. (1990). Governing the commons: The evolution of institutions for collective action. Cambridge university press.

Frey, S., Krafft, P. M., & Keegan, B. C. (2019). " This Place Does What It Was Built For" Designing Digital Institutions for Participatory Change. Proceedings of the ACM on Human-Computer Interaction, 3(CSCW), 1-31.

Popular governance models

- **BDFL:** “Benevolent Dictator for Life” who makes all final decisions
 - Examples: Ethereum, Django, Swift, Ruby, Pandas, Ubuntu, Linux, SciPy, Perl
- **Reputation ladder:** top contributors are granted decision making rights, policy decisions via committee vote
 - Examples: Red Hat, StackOverflow
- **Liberal contribution:** allow as many contributors as possible, and use consensus-seeking for policy decisions
 - Examples: node.js and Rust

Popular governance models

- **Steering committee:** regular elections from active contributors produce a small committee empowered to make decisions when consensus isn't working
 - Examples: Python (post-Guido von Rossum, 2018), node.js (for resolving technical disputes)

An experiment: independent judiciary

- Following 2020 election, an independent judiciary body got formed to review cases from Facebook, and is intended to help establish its content moderation practices

ANNALS OF TECHNOLOGY

INSIDE THE MAKING OF FACEBOOK'S SUPREME COURT

The company has created a board that can overrule even Mark Zuckerberg. Soon it will decide whether to allow Trump back on Facebook.

By Kate Klonick

February 12, 2021

Governance and privatization

- In privately-owned social platforms, the platform retains some control over governance decisions on the platform
 - E.g., Reddit sets the rules for how people can access Reddit content
 - Governance is happening on multiple levels
- Dictatorship, whether benevolent or not

MOTHERBOARD
TECH BY VICE

The Reddit Protest Is a Battle for the Soul of the Human Internet

An esoteric battle over API fees and access is highlighting a power struggle between corporate overlords and unpaid moderators. It's worth understanding, and it's worth fighting for.

<https://www.vice.com/en/article/g5yykm/the-reddit-protest-is-a-battle-for-the-soul-of-the-human-internet>

Governance and privatization

- On paper, the Reddit Protest was just a battle over API access
 - Reddit raised costs, making third party apps and moderation bots implausible
- But in reality, it was a disagreement over who had control over how the platform was run
 - Reddit moderators felt that they, as the people who cultivate the content on the platform, should have the final say

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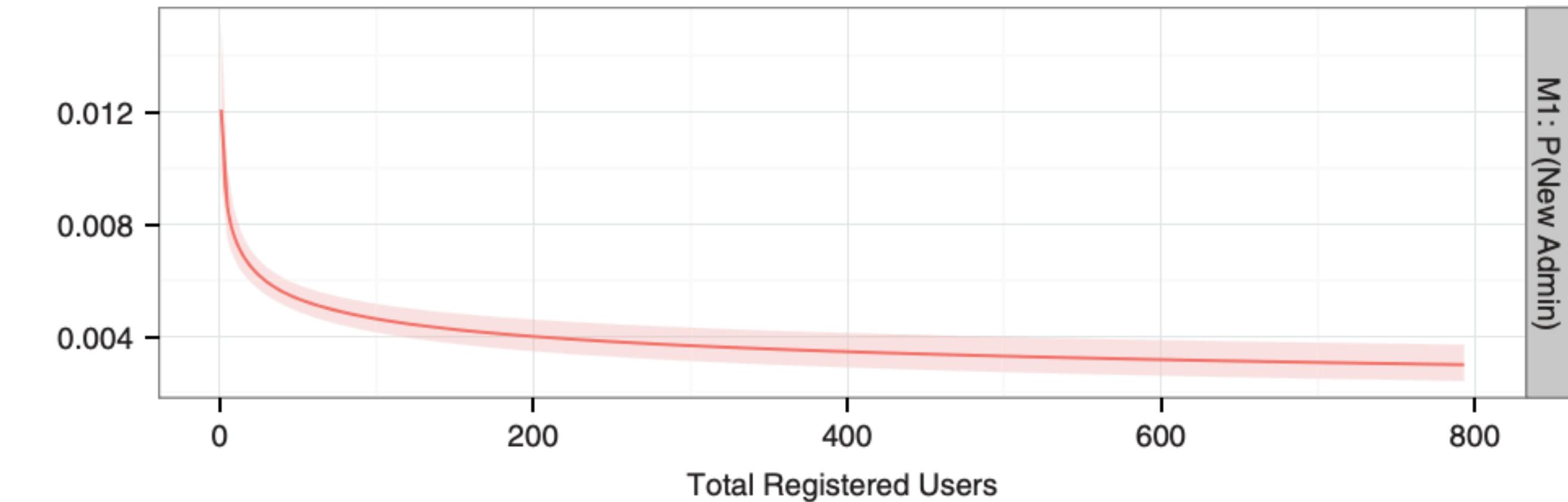
<https://www.vice.com/en/article/g5yykm/the-reddit-protest-is-a-battle-for-the-soul-of-the-human-internet>

Governance evolves over time

- Self-governing communities often start out with very few rules, and then grow in the number and complexity of their rules over time
- It's not clear that this is optimal:
 - Communities may be reacting to drama rather than planning
 - See content moderation, last class

Governance hierarchies form over time

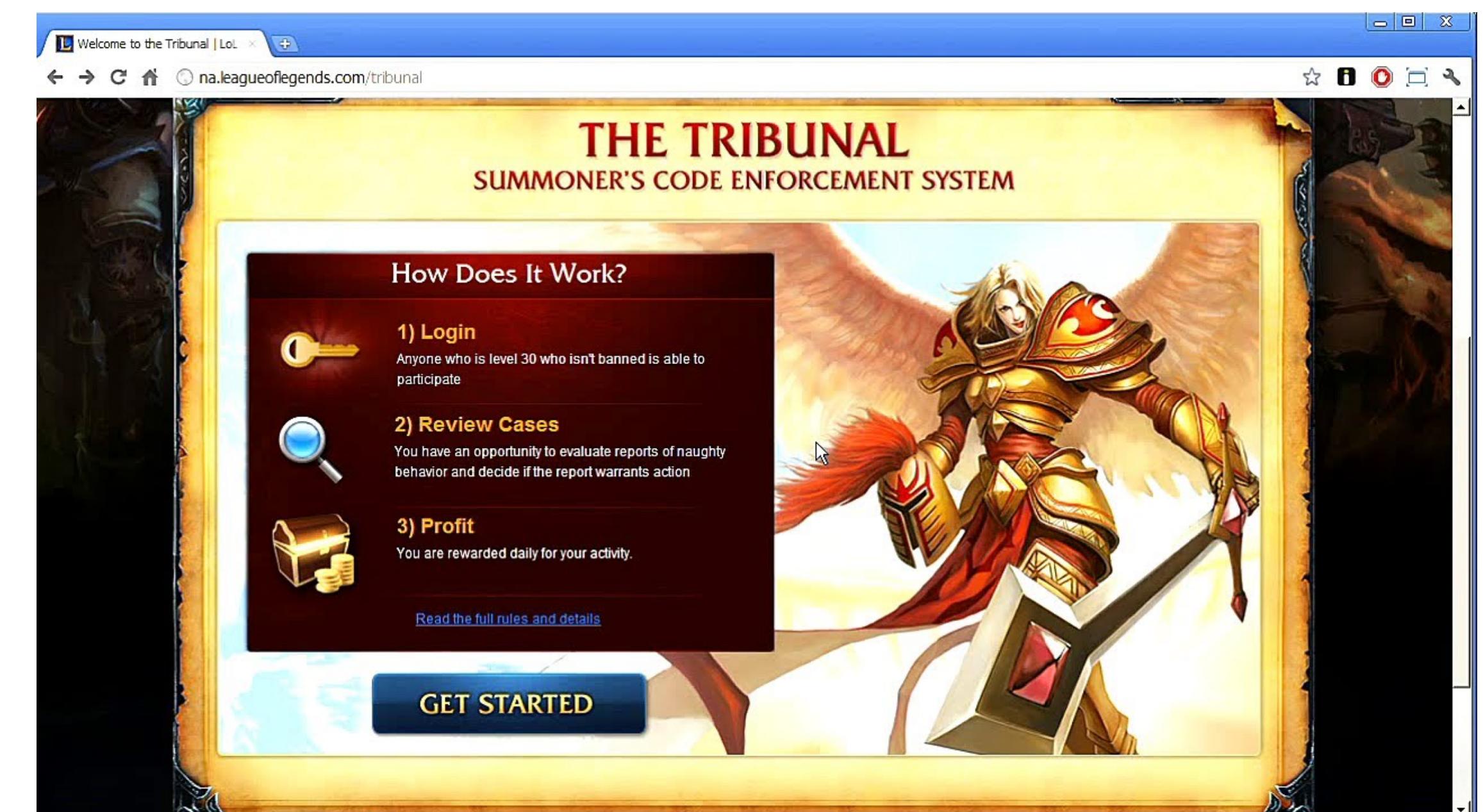
- Open-source projects and collaborative wikis sound very decentralized
 - But in practice, leadership hierarchies emerge
- As a system grows, it's harder to become an admin



Benkler, Y., Shaw, A., & Hill, B. M. (2015). Peer production: A form of collective intelligence. *Handbook of collective intelligence*, 175.
Shaw, A., & Hill, B. M. (2014). Laboratories of oligarchy? How the iron law extends to peer production. *Journal of Communication*, 64(2), 215-238.

Resolving conflict: juries

- Can we empower a jury of your peers?
- Sina Weibo: ~20–60k judges recruited from the user base, review cases of verbal abuse and personal attacks
 - About 2k expert judges review more complex cases such as rumor propagation
- League of Legends: judges at The Tribunal (RIP) reviewed cases of AFK flaming, harassment, racial slurs, and more



Peer juries: complications

- Users find the human-driven system more procedural just than the platforms' decisions or than algorithmic systems
- But, they still have limited trust in each other:
 - “*Why should I be judged by other ordinary Weibo users?*”
 - “*They just let random players make random decisions over whether a player can continue to play [League of Legends] or not.*”

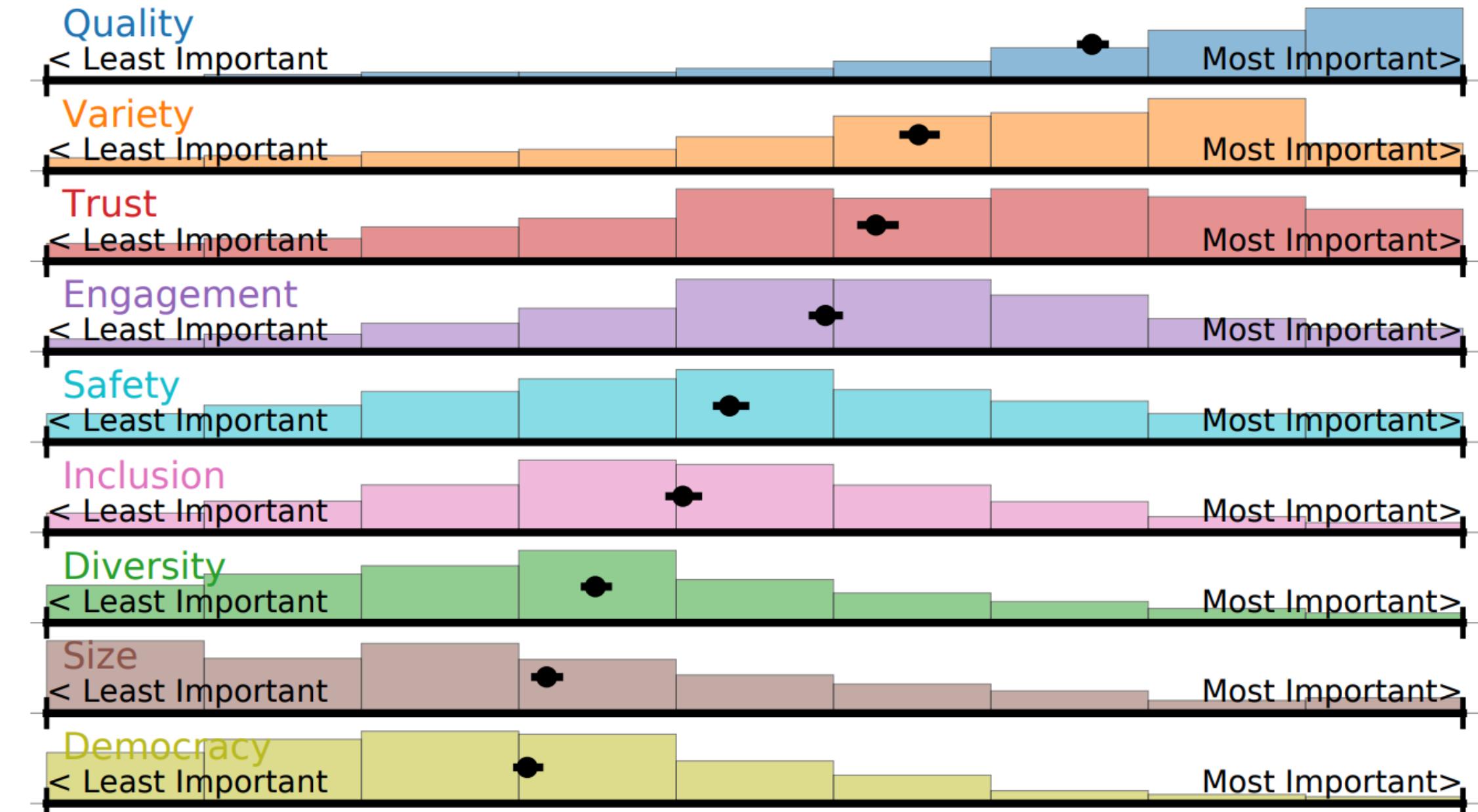
Why do you think there is less trust in online juries than offline juries?

Nobody has responded yet.

Hang tight! Responses are coming in.

But...

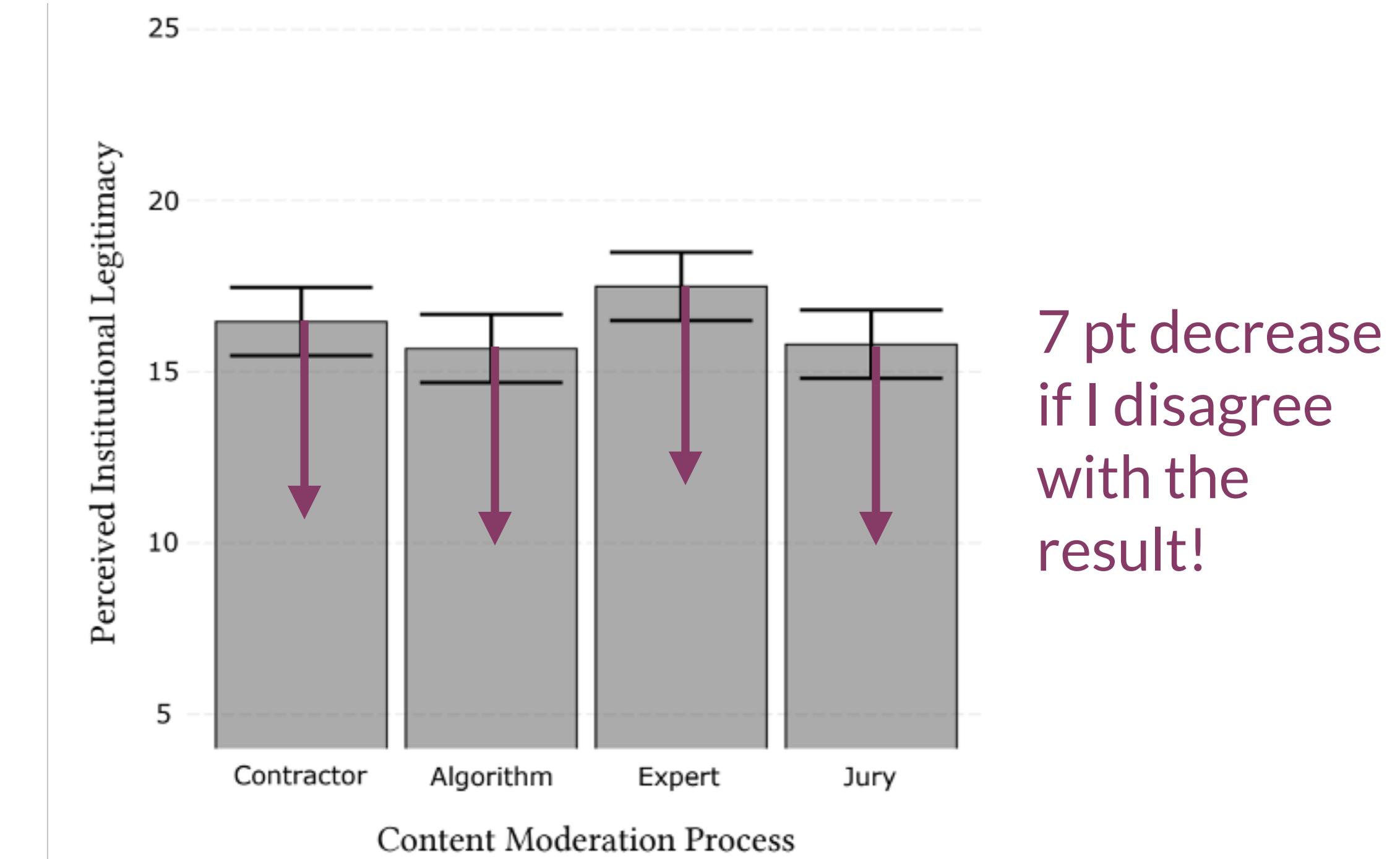
- Governance is a low priority
- Survey of Reddit communities on what values are most important:



Weld, G., Zhang, A. X., & Althoff, T. (2022, May). What makes online communities 'better'? measuring values, consensus, and conflict across thousands of subreddits. In Proceedings of the International AAAI Conference on Web and Social Media (Vol. 16, pp. 1121-1132).

And also...

- Survey experiment comparing the legitimacy attached to moderation decisions made by different groups
 - Our study result: expert panels (by ~1pt of 25)
 - But, whether people agreed with the result had much more influence (~7pt out of 25)
- Hard for any process to build legitimacy in a polarized media environment



7 pt decrease
if I disagree
with the
result!

Pan, C. A., Yakhmi, S., Iyer, T. P., Strasnich, E., Zhang, A. X., & Bernstein, M. S. (2022). Comparing the perceived legitimacy of content moderation processes: Contractors, algorithms, expert panels, and digital juries. Proceedings of the ACM on Human-Computer Interaction, 6(CSCW1), 1-31.

Switching gears: Decision-making

Why is decision-making hard?

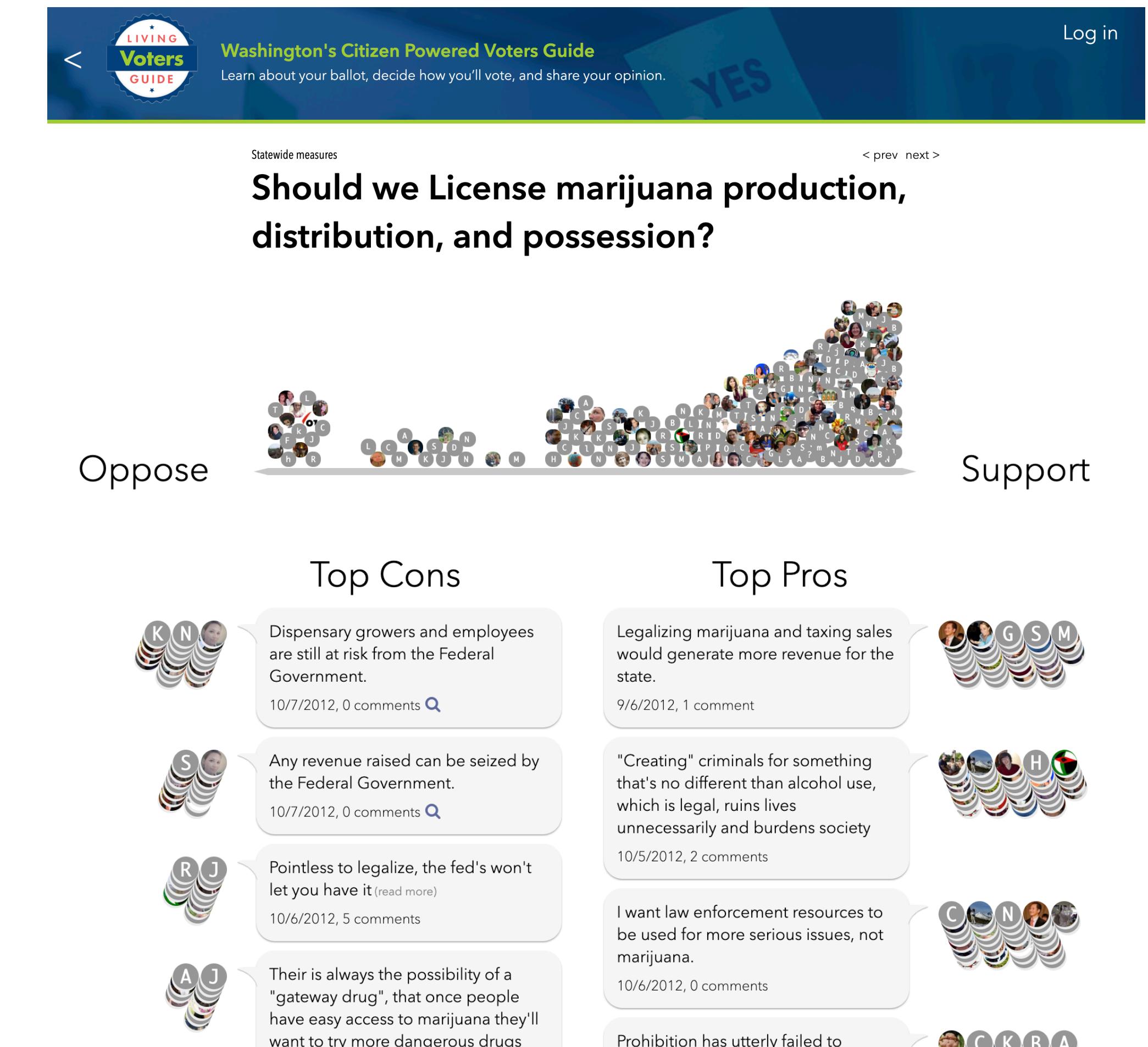
- The features that make it easy to gather online make it easy to disperse

The New York Times

Twitter Users Split on
Boycott Over Platform's Move
Against Rose McGowan

Structured debate

- Promote online deliberation: add metadata to merge similar arguments together, and connect replies to the original argument



Kriplean, T., Morgan, J., Freelon, D., Borning, A., & Bennett, L. (2012, February). Supporting reflective public thought with considerit. In Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work (pp. 265-274).

Structured debate



Search Debates

Go

Browse Our Categories



GMOs Are Good

Last updated: March 7, 2019

In its broadest sense, a genetically modified organism (GMO) refers to an organism whose genetic material has been altered in a way that does not occur naturally. Genes change naturally, either by mating or by natural recombination. But in this case, genetic fragments are scientifically inserted into the DNA of another organism to transform its collective genetic makeup, a process known as gene splicing. In plant and animal biotechnology, there are three fundamental areas that genetic modification is concerned with; the quality of

Yes because...

Production of Edible Medicine and Vaccines

This is perhaps the most innovative application of GMO. This process involves the modification of animal and plant genes in order to yield edible output with preventive molecules, for example milk, eggs and fruit. Edible vaccines, produced in milk or fruit could ease manufacturing and distribution costs by making it globally accessible to people. Vaccination through injection has many disadvantages, including the need for medically trained staff, high costs, not to mention constant cooling during transportation and storage. Use of needles also increases the risk of infections. In these cases, an edible vaccine comes in handy. In recent years, there have been examples of transgenic plants developed by researchers to help developing countries. [Transgenic](#) potatoes which contain cholera toxins have been developed to immunize against diseases. In 2004, the Pharma-Planta Programme was granted 12 million euros to develop genetically modified plants to help grow vaccines against tuberculosis and rabies.

No because...

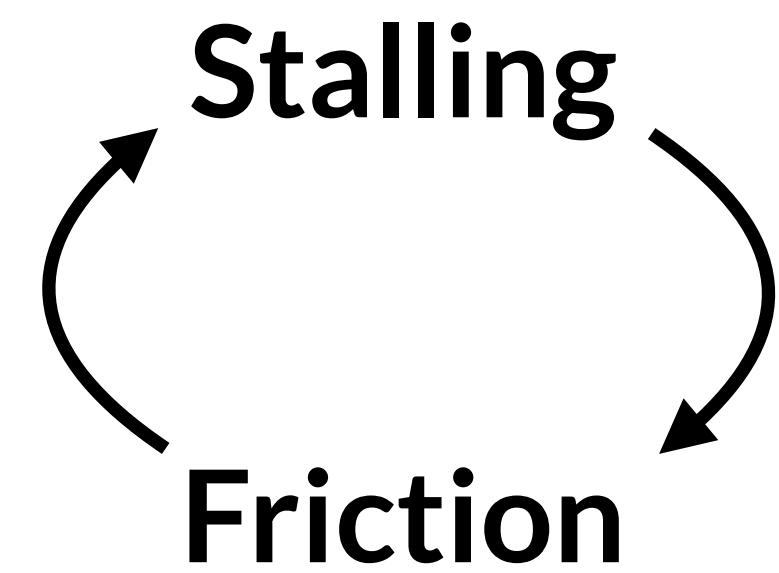
It is important to note that development of edible vaccines is still at very early stages. So far, the benefits outlined are only human-centric. It has not been articulated clearly how implementation of this

But, these features are insufficient to support online decision-making and consensus-building.

Stalling and friction

- Say that I want to suggest a change to the curriculum
 - “IN4MATX 153 should be a requirement for all students on campus!”
- What might I do?
 - Email some other professors, try to get approval
- What might happen?
 - “But wait, I think that [insert my class] should be a requirement for all students!”
 - Conversation stalls... too many competing priorities

Losing momentum,
no viable path



Flaming, violent
disagreement

Stalling and friction

- The structure of online communities can make stalling and friction worse
- Asynchronous online discussion can lead to people:
 - Throwing comments out, and not having to engage further
 - Conversations dragging out endlessly

**How might we overcome this tension?
One approach: structuring the rules of
discussion**

Voting

Idea 1



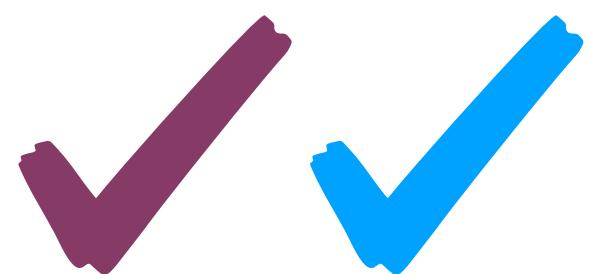
“Vote on your top two ideas”

Idea 2



Strengths: easy to understand,
useful for selecting a single best option

Idea 3



Idea 4



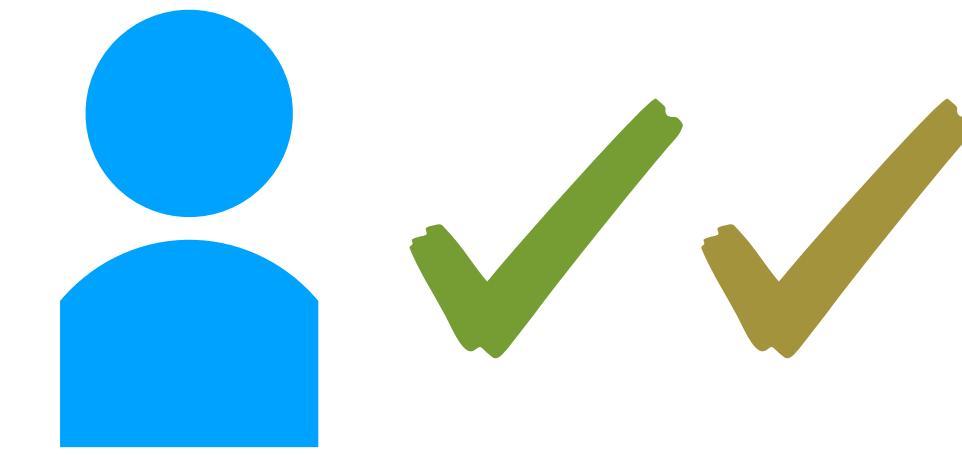
Weaknesses: simple model often produces
undesirable results (ranked choice voting,
etc. is better, but more complicated)

Idea 5



Liquid democracy

Idea 1



Idea 2



Idea 3



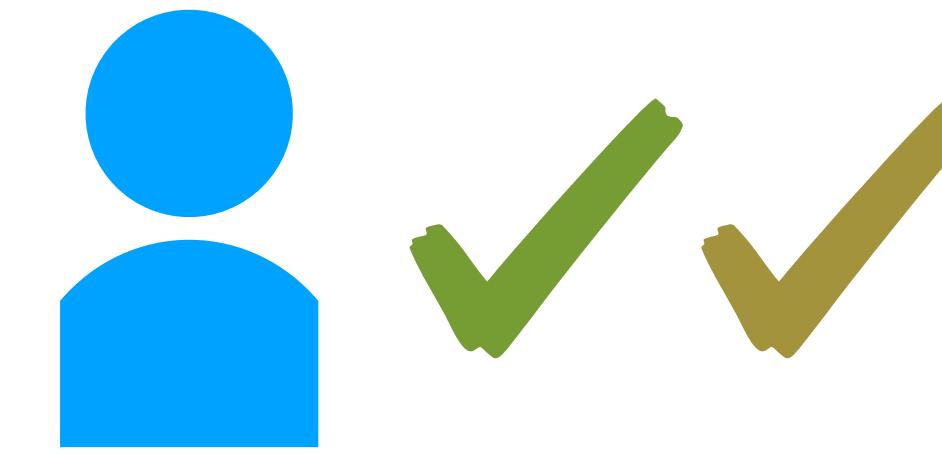
Idea 4

I can vote directly, or delegate my vote to a person or institution who I think knows more about the issue. They can then either vote or delegate their own votes.

Idea 5

Liquid democracy

Idea 1



Idea 2



Idea 3



Idea 4

Benefits: compromise between direct and representative democracy, technology makes this possible

Weaknesses: a small number of people can gain massive influence

Idea 5

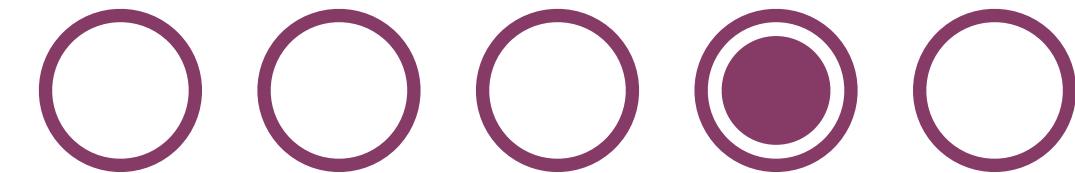
Kahng, A., Mackenzie, S., & Procaccia, A. (2021). Liquid democracy: An algorithmic perspective. Journal of Artificial Intelligence Research, 70, 1223-1252.

Likert Scale Rating



“Rate each idea”

Idea 1



Strengths: gets more information per idea,
allows ranking

Idea 2



Weaknesses: people tend to use the scale
differently

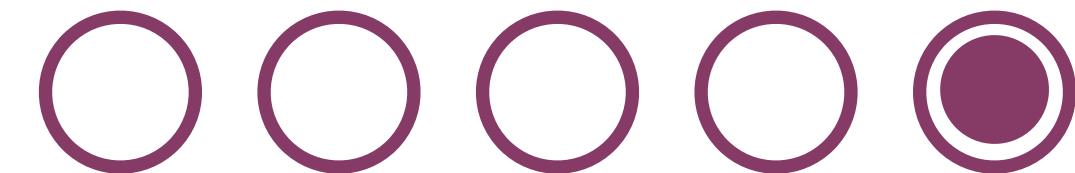
Idea 3



Idea 4



Idea 5

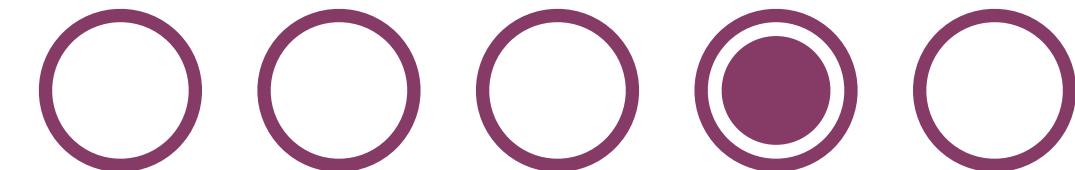


Likert Scale Rating



“Rate each idea”

Idea 1



Strengths: gets more information per idea,
allows ranking

Idea 2



Weaknesses: people tend to use the scale
differently (some people are nice)

Idea 3



Idea 4



Idea 5



Likert Scale Rating



Idea 1



“Rate each idea”

Idea 2



Strengths: gets more information per idea,
allows ranking

Idea 3



Weaknesses: people tend to use the scale
differently (some people are nice, others are
mean)

Idea 4



Idea 5



Likert Scale Rating



Idea 1



“Rate each idea”

Idea 2



Strengths: gets more information per idea, allows ranking

Idea 3



Weaknesses: people tend to use the scale differently (some people are nice, others are mean, many are extreme)

Idea 4



Idea 5



Likert Scale Rating



Idea 1



“Rate each idea”

Idea 2



Strengths: gets more information per idea, allows ranking

Idea 3



Weaknesses: people tend to use the scale differently (some people are nice, others are mean, many are extreme), we have limited ability to differentiate between the top rated ones

Idea 4

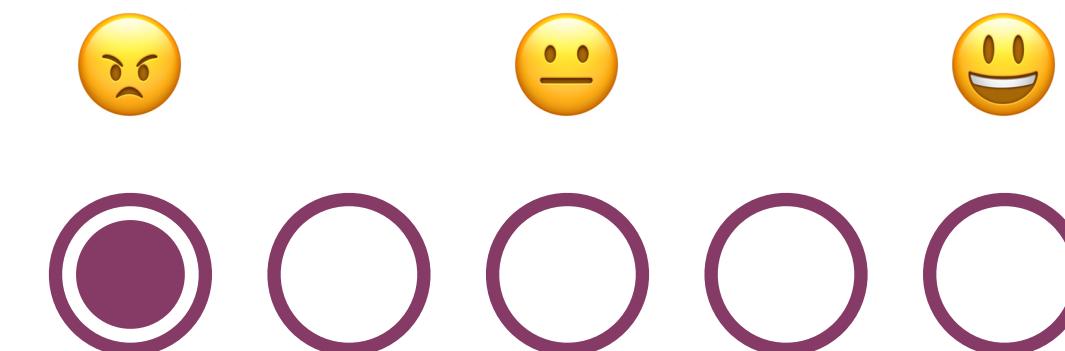


Idea 5



Likert Scale Rating

Idea 1



Idea 2



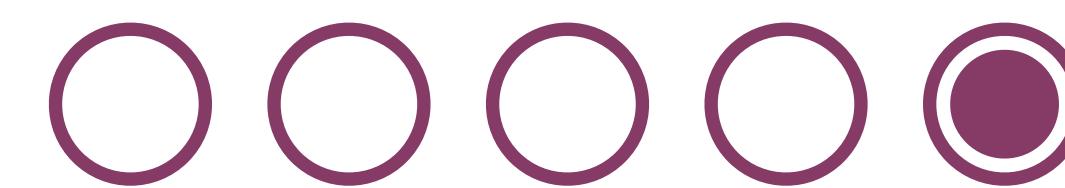
Idea 3



Idea 4



Idea 5



6. [Pho Avenue](#)

375 reviews

\$\$. Vietnamese

3. [Pho Vi Hoa](#)

1073 reviews

\$\$. Vietnamese

9. [Hometown Noodle](#)

564 reviews

\$. Vietnamese, Noodles

There's not a lot
of signal to
differentiate
these restaurants
on Yelp.

Comparison ranking

Which of these two ideas
do you prefer?

Idea 1

Idea 2

Comparison ranking

Which of these two ideas
do you prefer?

Idea 4

Idea 3

Comparison ranking

Which of these two ideas
do you prefer?

Idea 1

Idea 3

Comparison ranking

Look familiar?

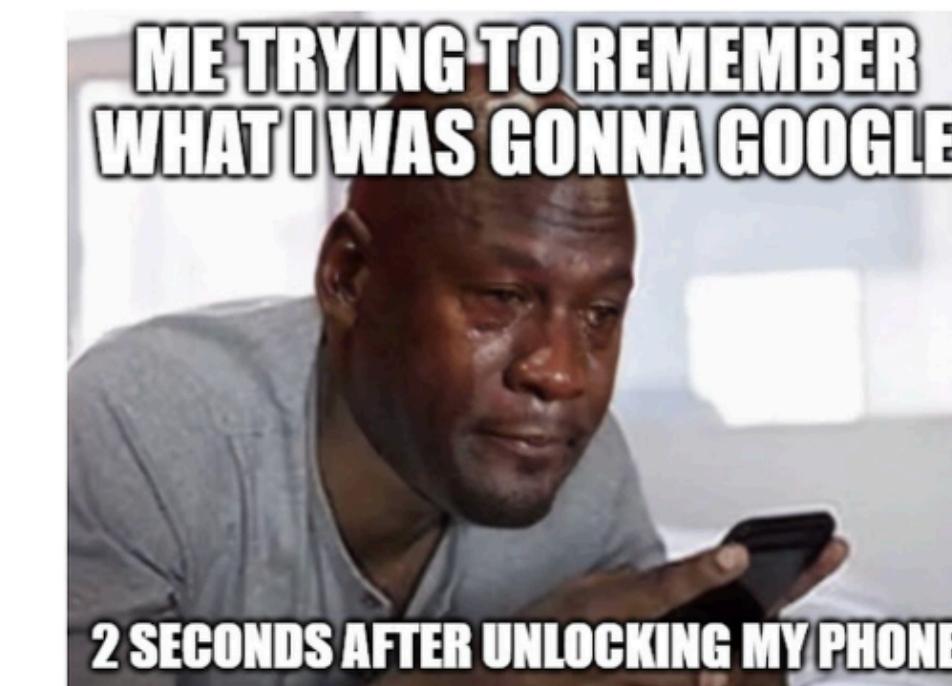
Welcome to the Grand INF153 Meme Rating

1. To ensure viewing the media in its intended format, please conduct this rating on your computer.
2. Compare each pair of memes carefully.
3. Select the meme you like more for each comparison.
4. You cannot change your choice once selected.

Round 12 / 50



The Left One



The Right One

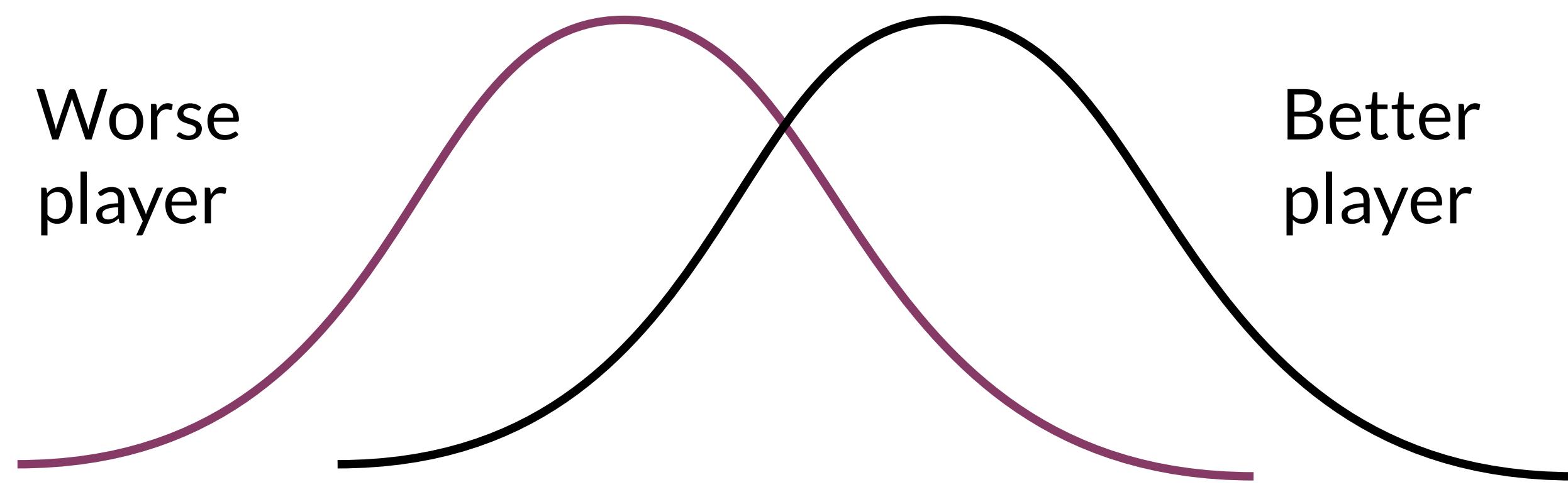
Next

Comparison ranking

- But how do we turn a bunch of comparisons into a score or ranking per item?
- Intuition:
 - If I beat something that's known to be low ranked, I must not be terrible
 - If I beat something that's known to be high ranked, I must be really good
- But how do I know what's low ranked and what's high ranked?

TrueSkill and Elo

- Elo: system developed to rank chess players based on their win-loss records against each other
- Player's performance across their games is normally distributed
 - Sometimes they play really well, other times they don't
- We therefore aim to estimate the mean of each player's distribution, and each game is a draw from that distribution



Summary

- Online communities face a lot of decisions on how they should be organized or what they should do
- Social platforms are great at eliciting opinions, but are generally terrible at helping to produce action
- Deliberation is challenging because there's no stopping criteria. Structuring the rules can help overcome stalling and friction
- There are many governance models, but the most important thing is to pick one

Today's goals

By the end of today, you should be able to...

- Articulate types of decisions that online communities often have to make regarding how they are run and what they do
- Describe the importance of governance in online communities, particularly in groups aiming for collective action
- Differentiate approaches to decision-making among peers in online spaces

Announcements

- A2 due today!
- A3 posted tomorrow, hopefully
- No class Monday
- Visitors Wednesday & the following Monday

Visitors!

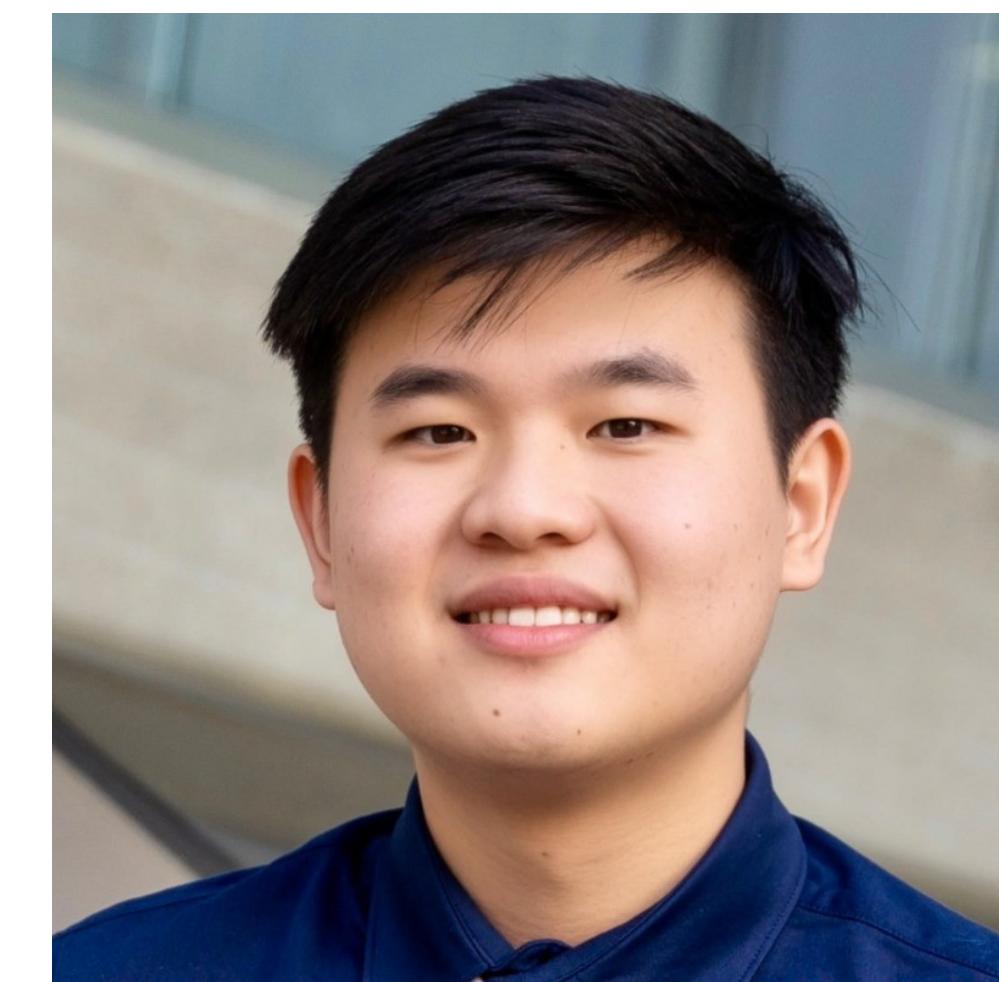
Visitors

- Wednesday, May 15
- Rajan Vaish, PhD
- Co-founder and CEO, Easel AI
- Formerly Snap's Research team



Visitors

- Monday, May 20
- Saba Karim & Mars Chheang
 - Mars is a UCI alum, SE class of 2021
 - He also worked with Dennis and I on research!
- CEO & Head of Engineering, Favs



Announcements

- Please be on time!
- Please come with questions
 - About running startups in the social media space
 - About user privacy
 - About technology constraints
 - About bringing research into practice
 - About product design
 - ...

IN4MATX 153: CSCW

**Class 12:
Governance**

Professor Daniel Epstein
TA Dennis Wang
Reader Weijie Du