

Computer-administered interviews and wiki surveys

Matthew J. Salganik
Department of Sociology
Princeton University

Summer Institutes in Computational Social Science
2020

The Summer Institutes in Computational Social Science is supported by grants from the Russell Sage Foundation and the Alfred P. Sloan Foundation.



	Sampling	Interviews	Data environment
1st era	Area probability	Face-to-face	Stand-alone
2nd era	Random digital dial probability	Telephone	Stand-alone
3rd era	Non-probability	Computer-administered	Linked

Human-administered → Computer-administered

- ▶ enables change
- ▶ requires change

[home](#)
[winningest kittens](#)
[losingest kittens](#)
[newest kittens](#)
[add your kitten](#)

[facebook group](#)
[kittenwar myspace](#)

[faq](#)
[e-mail us](#)

kitten search:

[t-shirts and stuff](#)



kittenwar



Henry

VS.



Betty

Click the cutest kitten picture!

Can't decide? [Refresh the page](#) for a draw.

[Kittenwar has a brilliant new server, check it out!](#) [Thank you!](#)

home
winningest kittens
losingest kittens
newest kittens
add your kitten
facebook group
kittenwar myspace

faq
e-mail us

kitten search:

t-shirts and stuff
RESULTS



WIN LOSE ↺



CLICK PICS FOR STATS

53% of people
agree that Henry is
cuter than Betty.

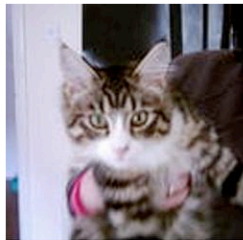


kittenwar



Young Japhy

VS.



Kizzibit

Click the cutest kitten picture!

Can't decide? [Refresh the page](#) for a draw.

[Kittenwar has a brilliant new server, check it out!](#) [Thank you!](#)

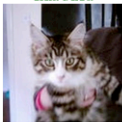
home
winningest kittens
losingest kittens
newest kittens
add your kitten
facebook group
kittenwar myspace

faq
e-mail us

kitten search:

Go

t-shirts and stuff
RESULTS



WIN LOSE

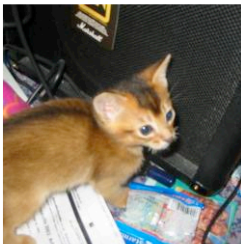


CLICK PICS FOR STATS

51% of people
agree that Kizzibit
is cuter than Young
Japhy.

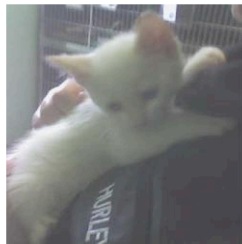


kittenwar



Maria

VS.

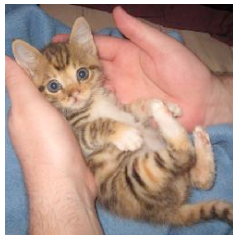


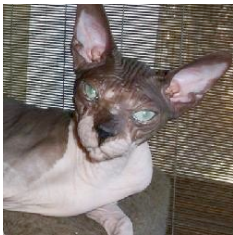
Emello Shikaka

Click the cutest kitten picture!

Can't decide? [Refresh the page](#) for a draw.

[Kittenwar has a brilliant new server, check it out!](#) Thank you!





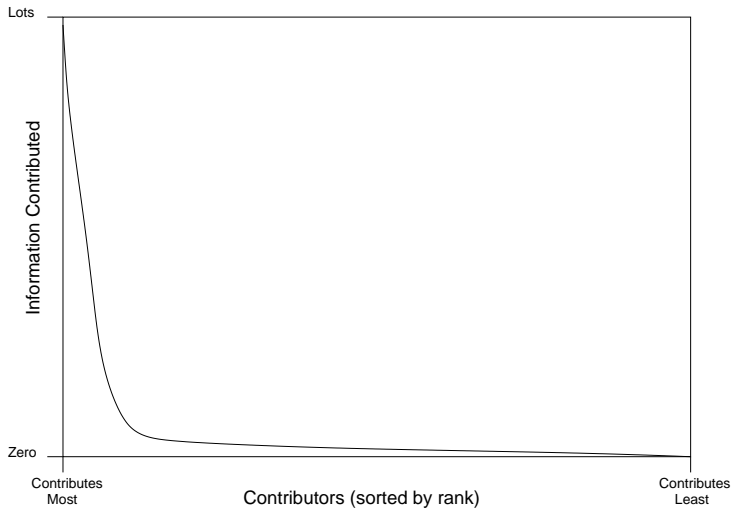
quantification or openness

quantification + openness =
wiki surveys

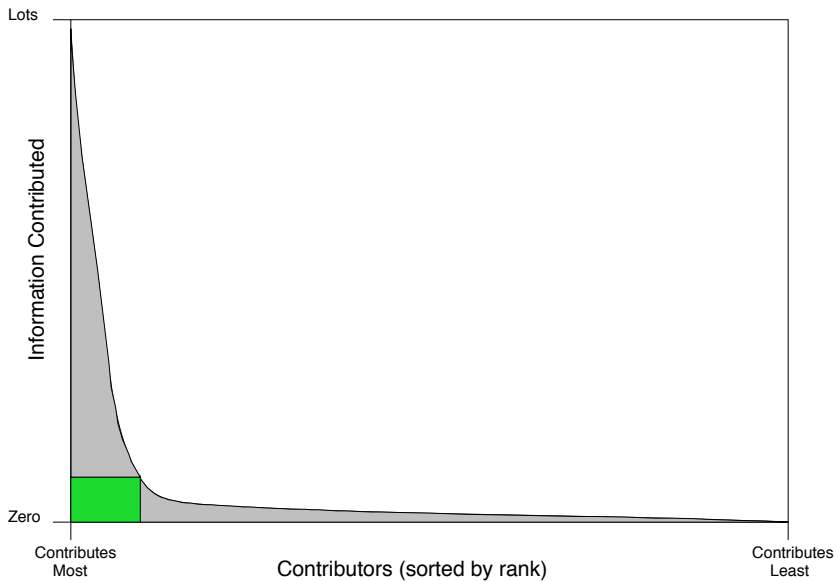
General principles of wiki surveys:

- ▶ greedy

Good web-based systems use
the **fat-head** and the **long-tail**



Surveys don't use the **fat-head** or the **long-tail**



General principles of wiki surveys:

- ▶ greedy

General principles of wiki surveys:

- ▶ greedy
- ▶ collaborative

General principles of wiki surveys:

- ▶ greedy
- ▶ collaborative
- ▶ adaptive



create
a question



collaborate
with others



discover
the best ideas

What is this?

All Our Ideas is a platform that enables groups to collect and prioritize ideas in a transparent, democratic, and bottom-up way. It's a suggestion box for the digital age.

[Learn more](#)

How does it work?

You can use All Our Ideas to create a website where visitors can vote on ideas and upload new ones. The intuitive and fun voting process yields powerful results.

[See an example](#)

Get started!

Click on the link below to get started with All Our Ideas. It is free, easy, and built on open source technology. Create your own interactive suggestion box and start discovering.

[Create a question](#)



This project is supported by a grant from the Center for Information Technology Policy at Princeton University.



All Our Ideas is open source software. Feel free to review, remix, or redesign. Also, you can use our API to create your own site.



[Log In](#)
[Create Your Own Question](#)
[About](#)



Learn how we are creating a greener,
greater New York City.

Which do you think is a better idea for creating a greener, greater New York City?

Seeded the wiki survey with 25 ideas:

- ▶ Require all big buildings to make certain energy efficiency upgrades
- ▶ Increase targeted tree plantings in neighborhoods with high asthma rates
- ▶ Establish a New York City Energy Planning Board

Which do you think is a better idea for creating a greener, greater New York City?

Focus on planting street trees before putting them
in existing green space

Enforce low density zoning laws and do Not grant
variances that are contrary to these protective
laws.

I can't decide

10 votes on 269 ideas

Add your own idea

Which do you think is a better idea for creating a greener, greater New York City?

Plant more trees

Get Bus Lanes on Broadway

I can't decide

11 votes on 269 Ideas

Add your own idea

You chose [Enforce low density zoning laws and do Not grant variances that are contrary to these protective laws.](#) over [Focus on planting street trees before putting them in existing green space](#)

Now you have cast 1 vote (average is 10)

[View all the results](#)

Which do you think is a better idea for creating a greener, greater New York City?

Provide funding to increase energy efficiency of buildings (PACE bonds/loans) creating green jobs, reducing emissions and utility bills.

Make sure that there are bike racks installed at or near all public schools and libraries.

I can't decide

12 votes on 269 Ideas

Add your own idea

You chose [Get Bus Lanes on Broadway](#) over [Plant more trees](#)

Now you have cast 2 votes (average is 10)

[View all the results](#)

Which do you think is a better idea for creating a greener, greater New York City?

Score

Keep NYC's drinking water clean by banning fracking in NYC's watershed.

84 [?]



Invest in multiple modes of transportation and provide both improved infrastructure and improved safety

81 [?]



Plug ships into electricity grid so they don't idle in port - reducing emissions equivalent to 12000 cars per ship.

78 [?]



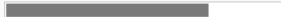
Implement congestion pricing in lower Manhattan

74 [?]



Continue enhancing bike lane network, to finally connect separated bike lane systems to each other across all five boroughs.

73 [?]



Composting! Provide municipal support for composting!!

73 [?]



Support and protect community gardens and create mechanisms to create new gardens and open space

72 [?]



Provide long-term leases for organic farms in unused public spaces, a garden at every public school and public housing development

72 [?]



Provide better transit service outside of Manhattan

72 [?]



Create a network of protected bike paths throughout the entire city

71 [?]



What are we trying to estimate?

Data

Vote	Session	Prompt	
1	1	item 4	item 1
2	1	item 3	item 1
3	1	item 4	item 3
4	2	item 3	item 4
5	2	item 4	item 2
\vdots	\vdots	\vdots	\vdots



Opinion matrix

$$\begin{bmatrix} \theta_{1,1} & \theta_{1,2} & \dots & \theta_{1,K} \\ \theta_{2,1} & \theta_{2,2} & \dots & \theta_{2,K} \\ \vdots & \vdots & \ddots & \vdots \\ \theta_{J,1} & \theta_{J,2} & \dots & \theta_{J,K} \end{bmatrix}$$

$\theta_{j,k}$: how much respondent j likes
item k

Which do you think is a better idea for creating a greener, greater New York City?

Seeded the wiki survey with 25 ideas:

- ▶ Require all big buildings to make certain energy efficiency upgrades
- ▶ Increase targeted tree plantings in neighborhoods with high asthma rates
- ▶ Establish a New York City Energy Planning Board

Recruited participants through Twitter, Facebook, blogs, etc.



@NYCMayorsOffice

NYC Mayor's Office

Do you have ideas about how to make NYC greener? Help update #PlaNYC.

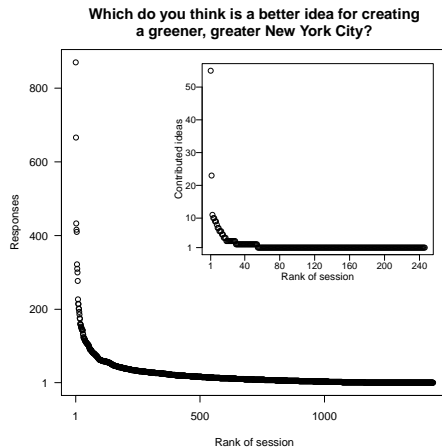
<http://bit.ly/9xeA88>

25 Oct via web ☆ Favorite ↻ Undo Retweet ↩ Reply

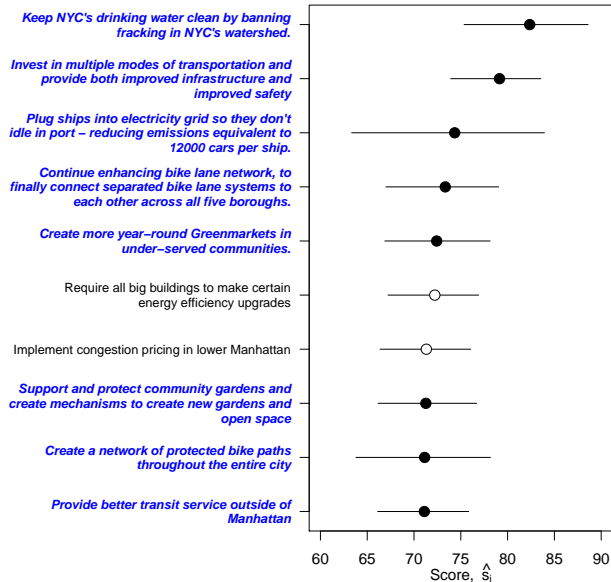
Retweeted by [allourideas](#) and 15 others



- ▶ 31,893 responses
- ▶ 464 ideas uploaded

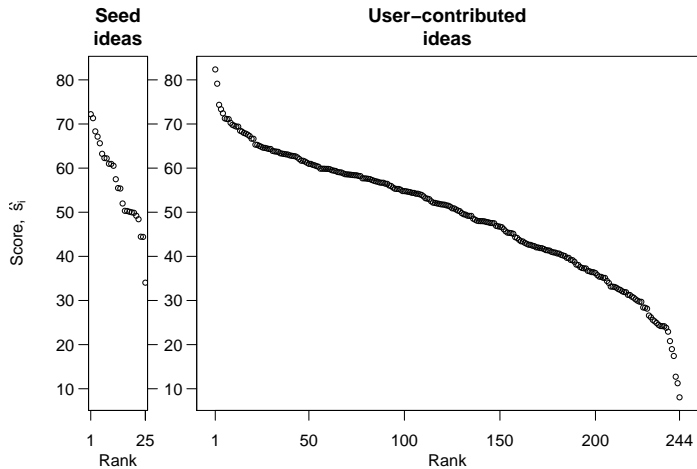


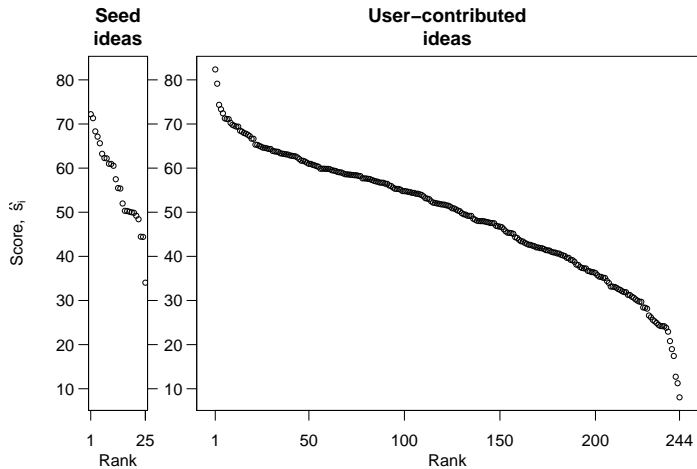
Which do you think is a better idea for creating a greener, greater New York City?



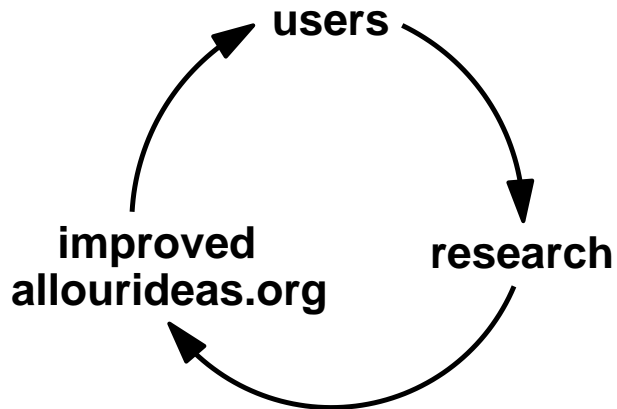
- ▶ Alternative framings: “Keep NYC’s drinking water clean by banning fracking in NYC’s watershed”

- ▶ Alternative framings: “Keep NYC’s drinking water clean by banning fracking in NYC’s watershed”
- ▶ Novel information: “Plug ships into electricity grid so they don’t idle in port - reducing emissions equivalent to 12000 cars per ship.”





variance + volume \rightarrow extreme cases



Currently hosting:

14,000 wiki surveys with 75,000 ideas and 23 million votes



- ▶ Questions about building it?
- ▶ Questions about system-building as part of social research? (professional concerns?, kinds of things learned?)