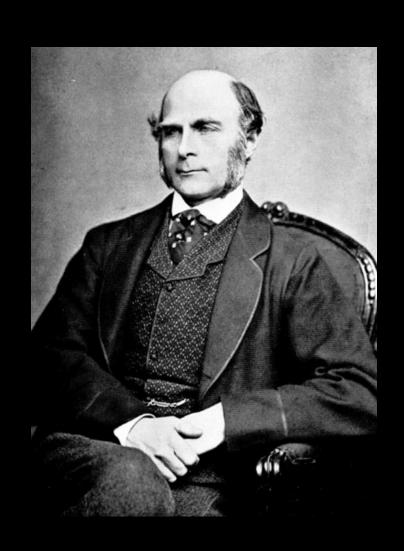
Exploring the Wisdom of Crowds

Sharad Goel
Stanford University

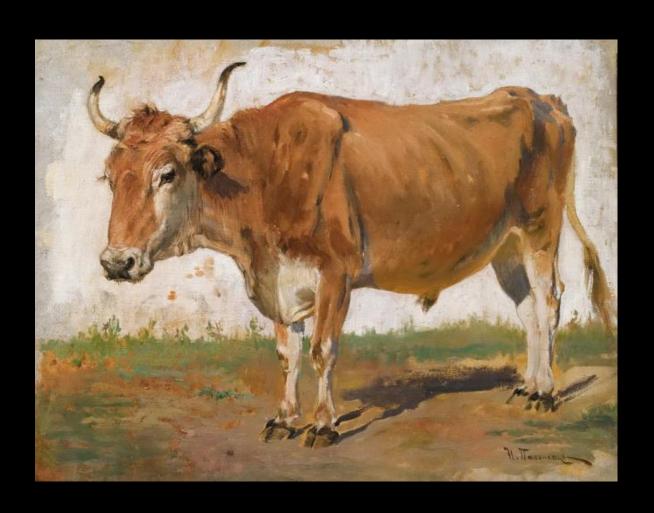
February 13, 2015

Francis Galton



1906 Plymouth County Fair

What is the weight of the ox?



1906 Plymouth County Fair

What is the weight of the ox?

800 guesses median guess was 1207 lbs.

1906 Plymouth County Fair

What is the weight of the ox?

800 guesses median guess was 1207 lbs.

actual weight was 1198 lbs.

A NEW YORK TIMES BUSINESS BESTSELLER

"As entertaining and thought-provoking as The Tipping Point by Malcolm Gladwell. . . . The Wisdom of Crowds ranges far and wide." —The Boston Globe

THE WISDOM OF CROWDS

JAMES SUROWIECKI

WITH A NEW AFTERWORD BY THE AUTHOR



Wisdom of the crowd

The collective opinion of a crowd can outperform the judgments of any one individual

Madness of crowds

Charles Mackay

riots economic bubbles mass hysteria herding

Research question

When are crowds "wise"?

Research question

How best to aggregate opinions?

How big a crowd do you need?

What is the effect of social influence?

Research question

What is the underlying mechanism?

Experimental design

- 1. Systematically construct thousands of tasks
 - 2. Recruit a crowd to complete the tasks
 - 3. Analyze the responses

Studying crowds, with crowds

A mini-experiment in "collective intelligence"

http://goo.gl/forms/WG1kWgYjke

Give your best guess

Do not look up the answer

Do not talk to anyone

Don't worry if you don't know the answers!

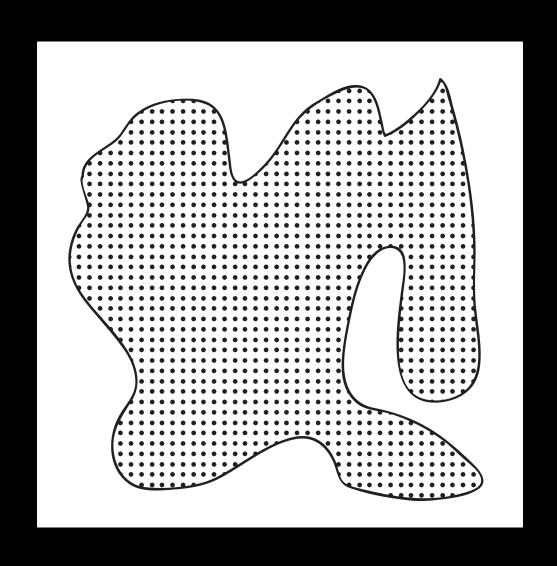
What is the total area of India? (km²)



In what year was this painting made?



How many dots are in the figure?



India vs. Pakistan

Cricket World Cup, Game 4

How many runs do you think each team will score?

Assignment

literature review

Document past studies on the wisdom of crowds

Assignment

brainstorm tasks

be creative, but realistic

Assignment [optional] apply to design experiment platform

teams should have experience with HTML, CSS, PHP, JavaScript, and MySQL