# Investigating "Wisdom of the Crowds" at Scale

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# Background

The "wisdom of the crowd" phenomenon has been documented in a variety of contexts and domains.

Surprisingly, we still have little understanding of why, or even when, the phenomenon holds. The diversity of experimental designs, subject pools, and analytic methods employed, have led to inconclusive and often contradictory results.

To date, there has been no comprehensive, unified study of the phenomenon.

# **Research Questions**

- Speed of convergence of crowd answer as a function of the crowd size
- Susceptibility to social influence
- Statistical aggregation methods by domain
- · Efficient expert identification

# **Experimental Design**

 Develop a modular online platform to investigate the largest-study of wisdom of the crowds to date.

 Crowdsource the construction of domains to over 60 students from 18 institutions (listed as authors)

## **Multiple media**

- Text Image
- Audio
- Video

### Social conditions

- Previous 5 answers
- Previous 5 most confident answers



What is the name of this constellation?

Answers from last 5 troopers:		
Leo	2	
Apus	2	
Lupus	0	
Columba	1	
Gemini	0	

Answei Leo Lupus Columba Gemini How confident are you? (----) Clueless

#### Question types

- Point estimate.
- Multiple choice / binarv
- Ordering

Next question

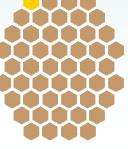
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Certain **Confidence prompt** Beginning of each

- domain
- Every question

#### 20 questions

Participants on Mechanical Turk complete 1,000 questions on 50 domains



Users progress through a hierarchy of avatars as they complete domains.



50 domains

< wisdomofcrowds.stanford.edu >

**Platform Design**