

# Forecasting Science & Technology (ForeST)

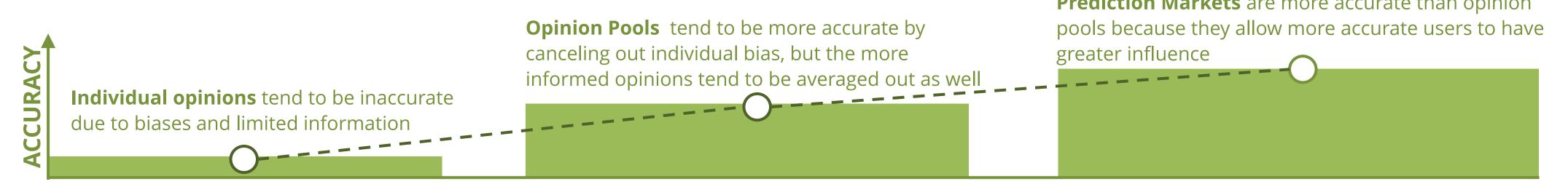
Crowdsourcing Forecasts of Significant Science and Technology Events

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# Goal

Generate accurate probabilistic forecasts for S&T developments by combining the judgments of thousands of subject matter experts

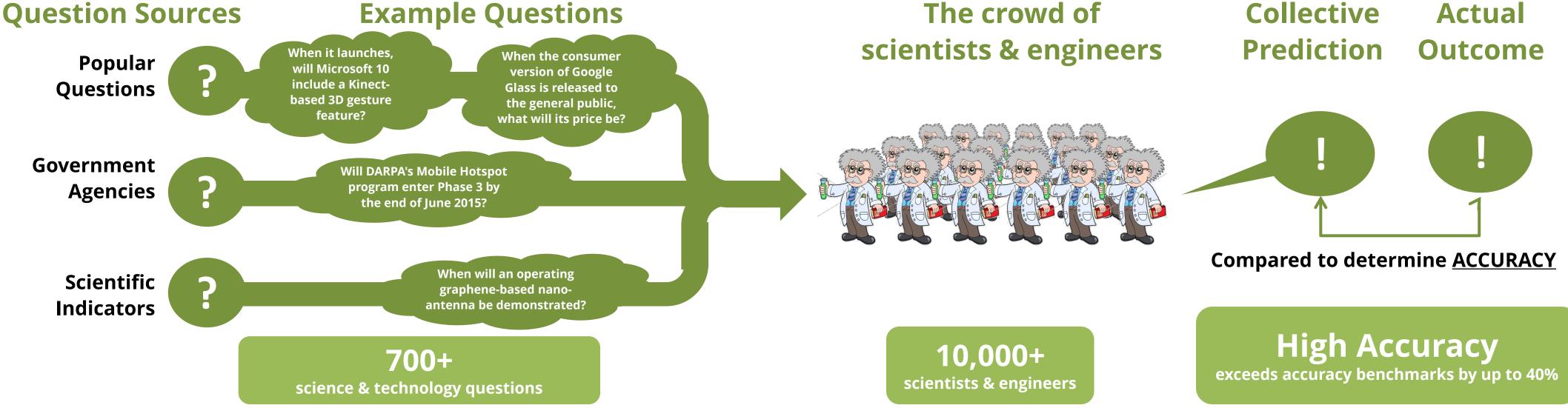
# A prediction market is more accurate than collections of opinions and individual opinions Prediction Markets are more accurate than opinion



# Approach

### Using the "wisdom of crowds" for science and technology forecasting

Build the world's largest prediction market for S&T events. Nuanced conditional forecasts for ~1,000 S&T events per year are made by ~10,000 subject matter experts in dozens of countries. Data-driven (i.e., scientific and patent literatures) indicators are used to generate many questions. Program Schedule: June 2013-June 2015



How it works: Sign-up today at www.scicast.org

### Thousands of scientists and engineers use this system to make personal predictions Find questions to answer

### Easy-to-use web



based	on	person	al exp	ertise

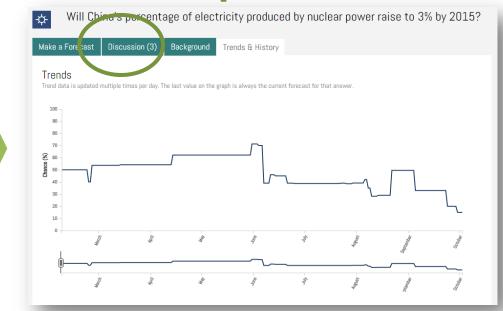
#### Will DARPA's Mobile Hotspot program enter Phase 3 by the 56% Chance end of June 2015 When it launches, will Microsoft 10 include a Kinect-based 35% Chance 3D gesture feature HAT DO YOU THINK Will a maneuverable airship lift more than 60 tons of cargo 50% Chance above an altitude of 20 km by June 2017 HAT DO YOU TH low many nearly extinct languages will the Ethnologue language catalog report ir SHOW POSSIBLE ANSWERS

Make a F	orecast Discussio (3)	Background	Trends & History	
•	Almost surely	90% - 100%		
0	Very likely	80% - 90%		
0	Likely	60% - 80%		
0	As likely as not	40% - 60%		
0	Unlikely	20% - 40%		
0	Very unlikely	10% - 20%	Current forecast	
0	Almost surely not	0% - 10%		

**Make forecasts!** 

### **Useful background** information is provided...

### **Evaluate opinion of market**



Users can engage in discussions, or interact indirectly in a prediction market

## Potential Impact

to participate...

# Evaluation

Provide analytic methods that maintain technical vigilance across all disciplines and multiple languages.

### 15+ technical articles produced **Received favorable media attention:**

- **The Chicago Tribune:** *SciCast Launch! Crowdsourced*  $\bullet$ Forecasting Project from George Mason University
- Wall Street Journal: U.S. Intelligence Community Explores More Rigorous Ways to Forecast Events

Forecasts are scored against actual events, as they occur, & against alternative forecasting methods used in academia, industry, & the IC.

Independent testing and evaluation of SciCast's accuracy found that it **exceeds current accuracy benchmarks by** *up to 40%* 



# **Research Teams**

