

2016 Election Forecast

President Updated Nov. 8, 2016

Senate Updated Nov. 8, 2016

Analysis Updated Nov. 9, 2016

We're forecasting the election with three models

O Polls-plus forecast What polls, the economy and historical data tell us about Nov. 8

O Polls-only forecast What polls alone tell us about Nov. 8

O Now-cast Who would win the election if it were held today

National overview

Updates

National polls

States to watch

Arizona

Colorado

Florida

Georgia

lowa

Maine

Michigan

Minnesota

Nevada

New Hampshire

New Mexico

North Carolina

Ohio

Pennsylvania

Utah

Virginia

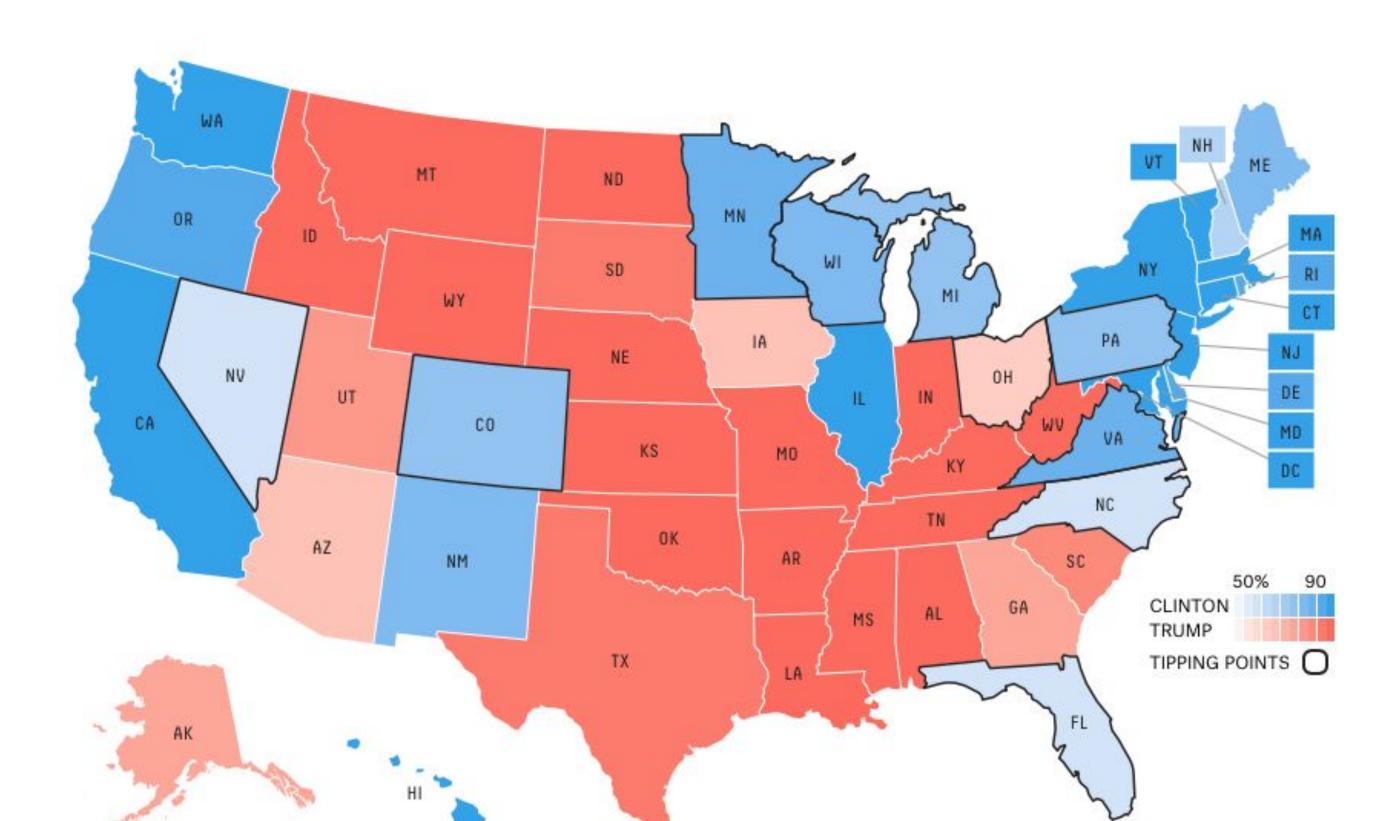
Wicconcin

Who will win the presidency?



Chance of winning



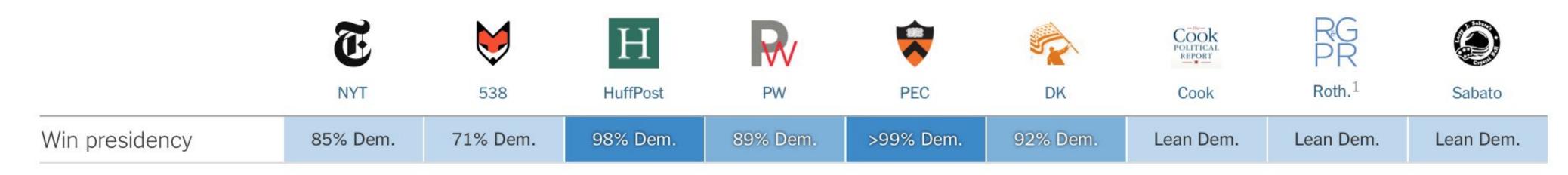




How Other Forecasts Compare

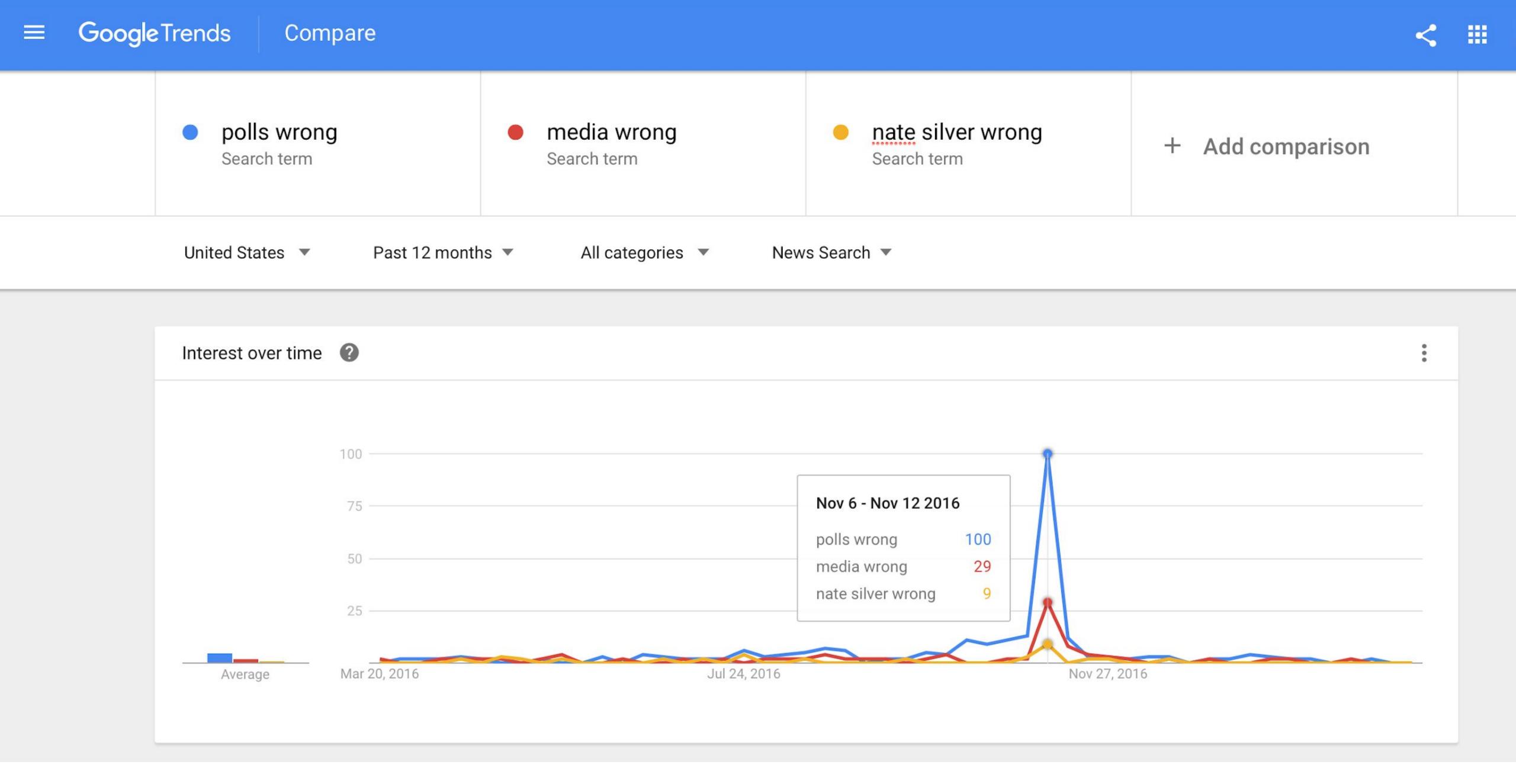
The New York Times is one of many news organizations to publish election ratings or forecasts. Some, like FiveThirtyEight or the Princeton Election Consortium, use statistical models, as The Times does; others, like the Cook Political Report, rely on reporting and knowledgeable experts' opinions. PredictWise uses information from betting markets.

We compile and standardize these ratings every day into one scoreboard for comparison. First, every organization's estimate for who will win the presidency:



Note: The 538 model shown is its default (polls-only) forecast.

Qualitative ratings reflect the rating for the state in the middle of each organization's forecast, weighted by electoral votes.



@bramwessel @factorfirm <u>factorfirm.com</u>

PLACES | THINGS MADE OF INFO

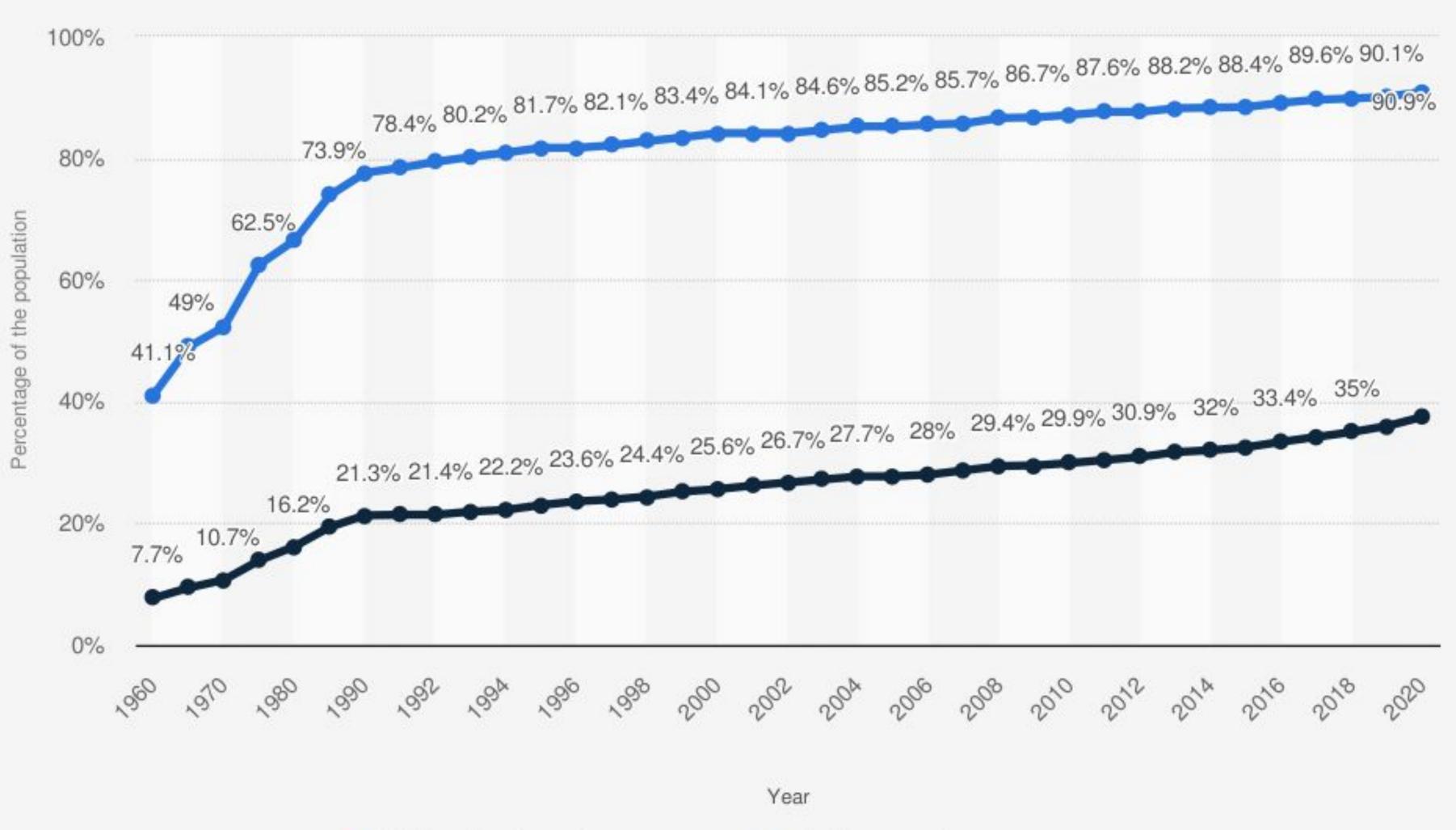




INFLECTION POINT

SINFLEGIED

Educational attainment distribution in the United States from 1960 to 2020



High school graduate or more College graduate or more

STRAM POLL...





2

All

Images

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About 24,500,000 results (0.73 seconds)

Who Killed JFK? - Third World Traveler

www.thirdworldtraveler.com/CIA/Who_Killed_JFK.html ▼
Mary Meyer, a mistress of JFK's during the White House years and the estranged wife of CIA veteran Cord Meyer, was murdered in October 1964 in a park in ...

Assassination of John F. Kennedy - Wikipedia

https://en.wikipedia.org/wiki/Assassination_of_John_F._Kennedy ▼
Jump to President Kennedy declared **dead** in the emergency room - Further information: Timeline of the **John F. Kennedy** assassination. The staff at ...

Deaths: 2 (President Kennedy, J. D. Tippit)

Location: Dealey Plaza, Dallas, Texas, U.S.

Date: November 22, 1963; 53 years ago; 12:30 ... Non-fatal injuries: 2 (Governor Connally, James ...

John F. Kennedy assassination conspiracy theories - Wikipedia

https://en.wikipedia.org/wiki/John_F._Kennedy_assassination_conspiracy_theories ▼
Jump to **Murder** weapon - The Warren Commission found that the shots that **killed** Kennedy and wounded Connally were fired from the Italian 6.5mm ...

JFK Assassination: Who Killed President Kennedy?

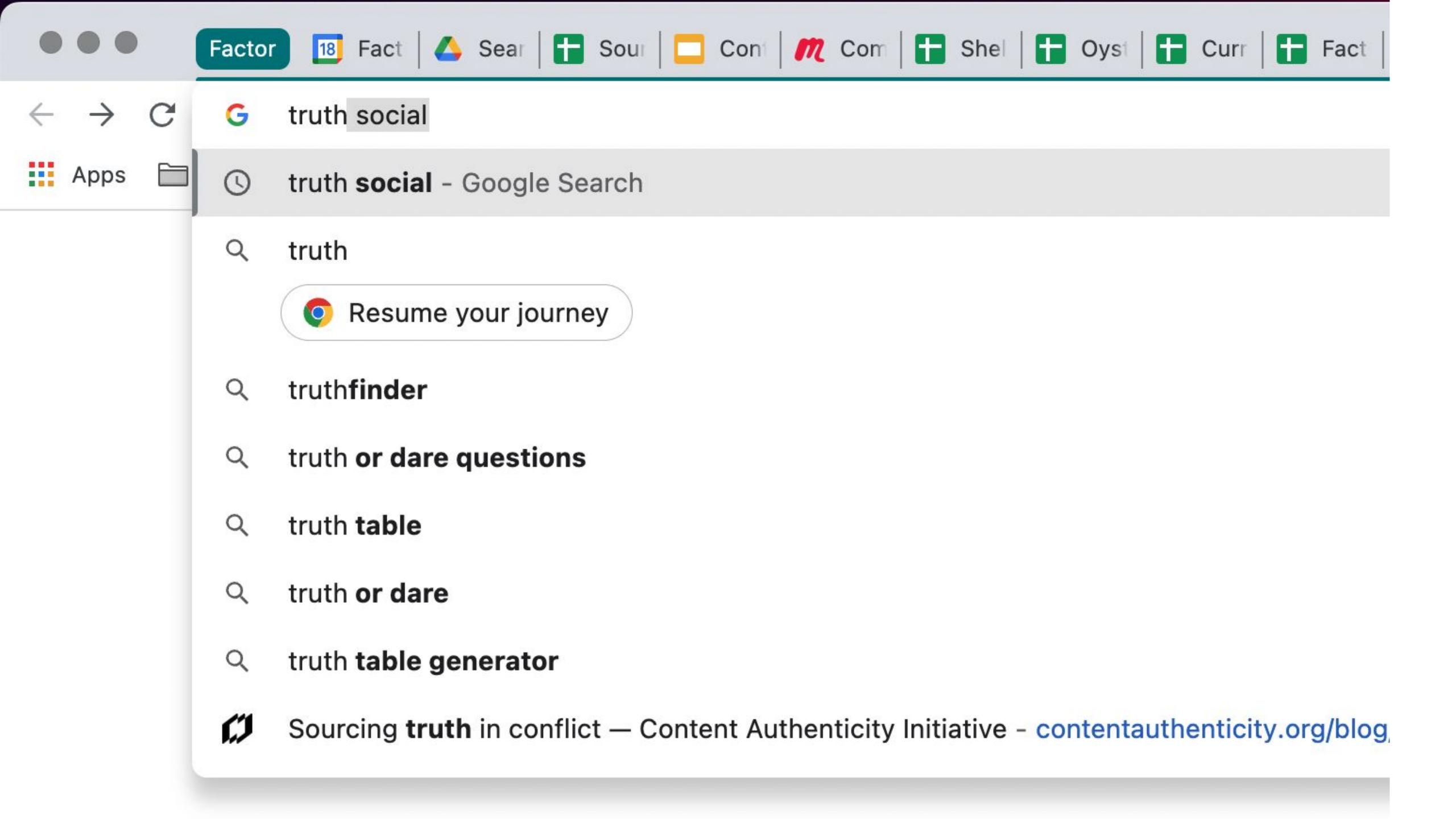
22november1963.org.uk/ ▼

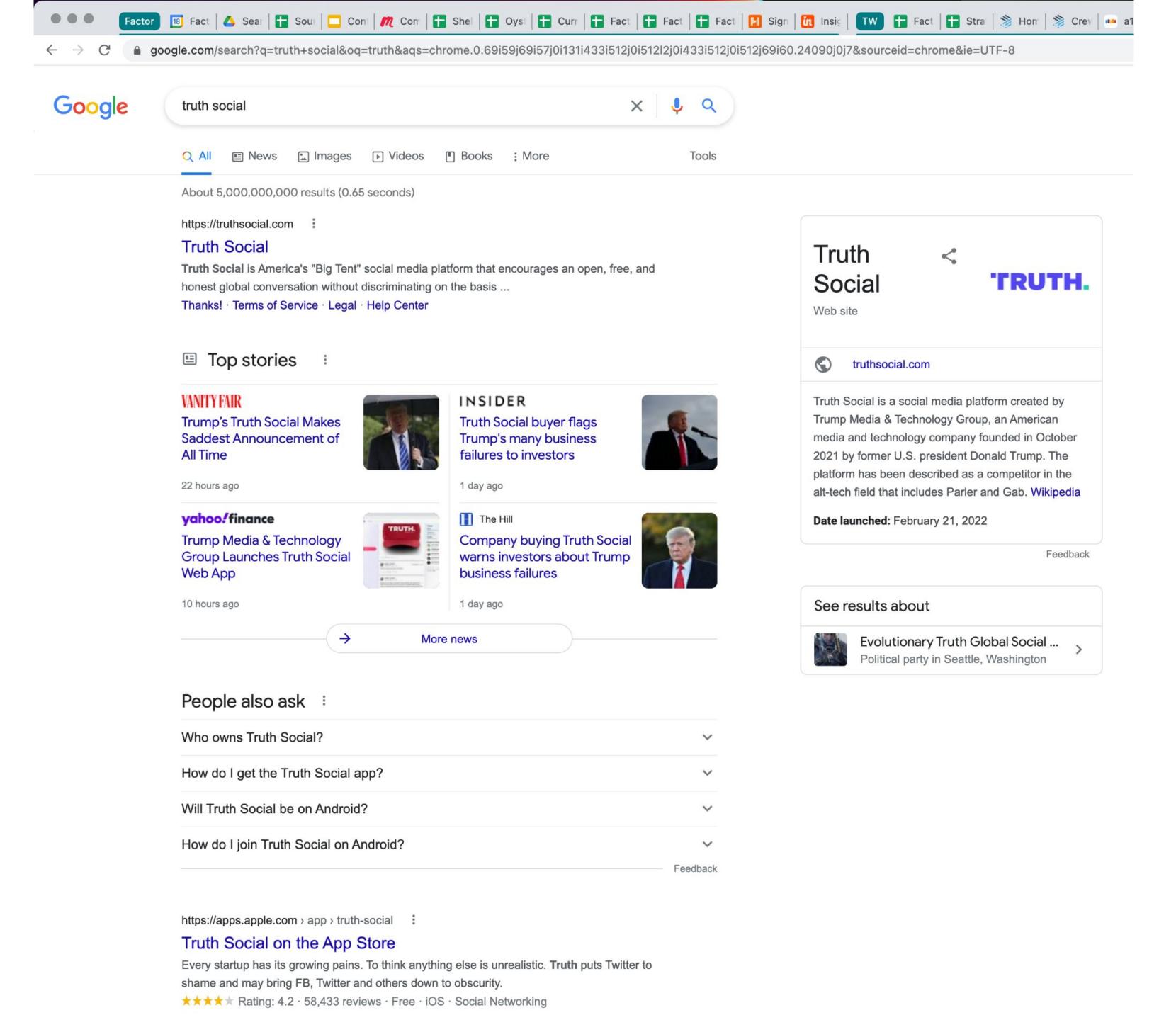
Google

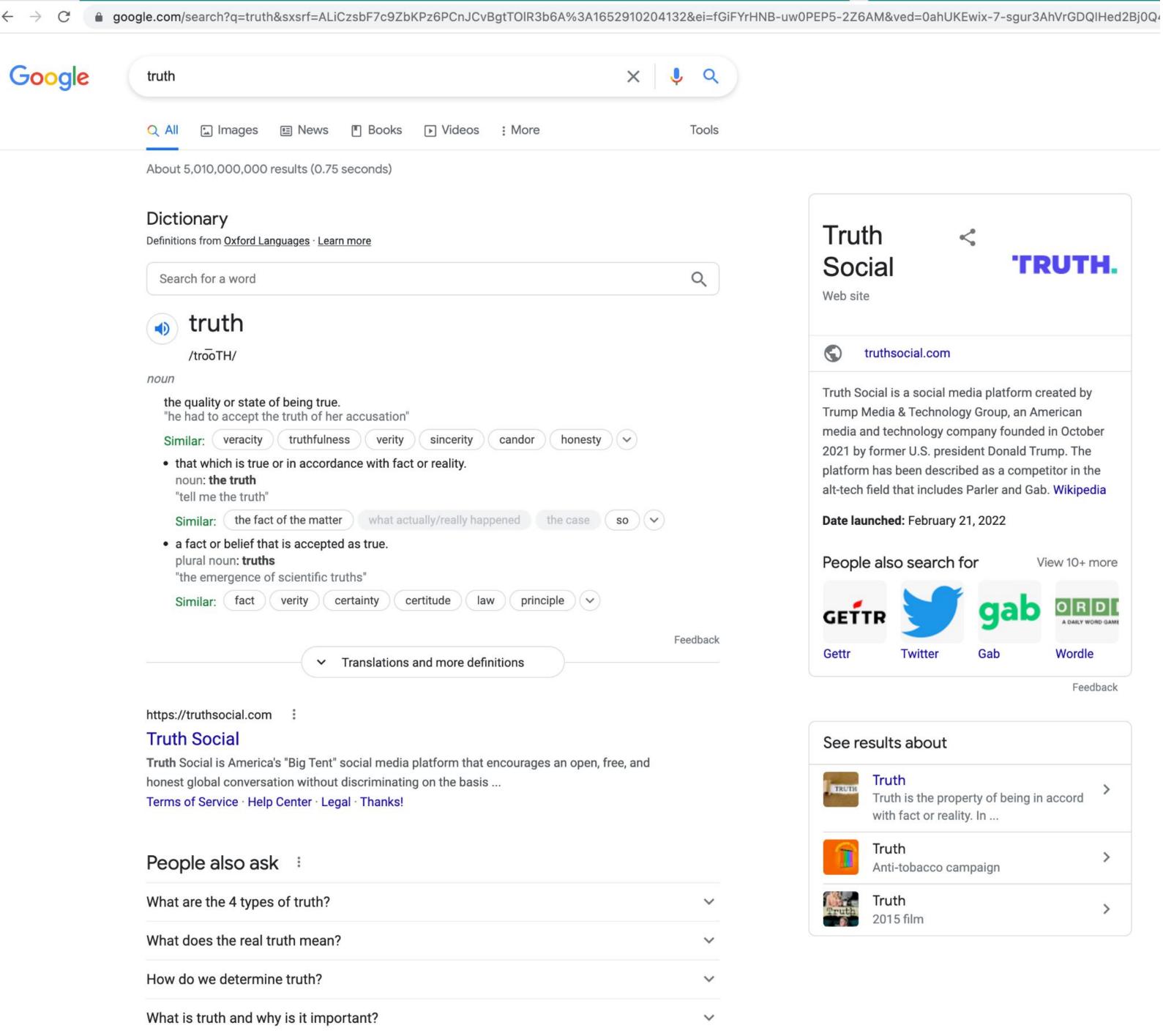
Search Google or type a URL

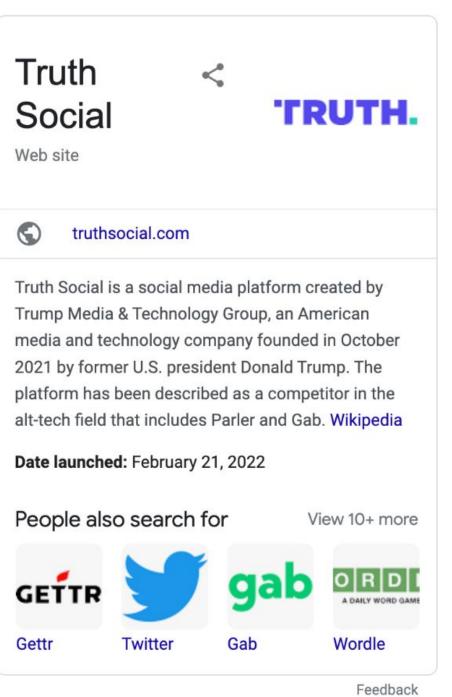
ESPN+ Paramount Pl... Amazon.com Zillow Home

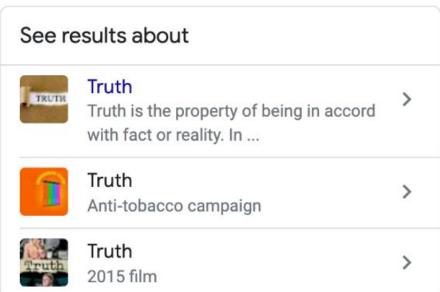
| Compared to the content of the con











Feedback





Official Blog

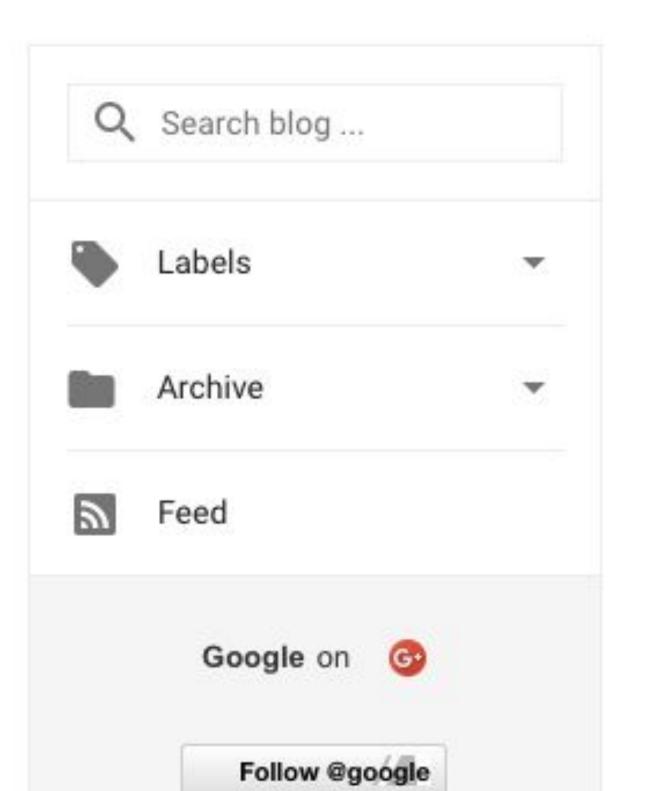
Insights from Googlers into our products, technology, and the Google culture

Finding more high-quality sites in search

February 24, 2011

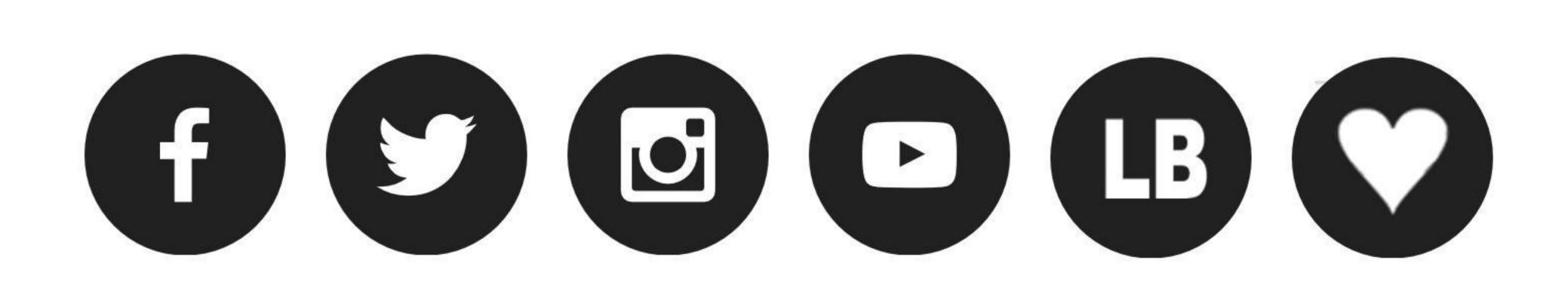
Our goal is simple: to give people the most relevant answers to their queries as quickly as possible. This requires constant tuning of our algorithms, as new content—both good and bad—comes online all the time.

Many of the changes we make are so subtle that very few people notice them. But in the last day or so we launched a pretty big algorithmic improvement to our ranking—a change that noticeably impacts 11.8% of our queries—and we wanted to let people









facebook sign up



Chris Cox O
October 1, 2014 · Menlo Park, CA · O

I want to apologize to the affected community of drag queens, drag kings, transgender, and extensive community of our friends, neighbors, and members of the LGBT community for the hardship that we've put you through in dealing with your Facebook accounts over the past few weeks.

In the two weeks since the real-name policy issues surfaced, we've had the chance to hear from many of you in these communities and understand the policy more clearly as you experience it. We've also come to understand how painful this has been. We owe you a better service and a better experience using Facebook, and we're going to fix the way this policy gets handled so everyone affected here can go back to using Facebook as you were.





45th President of the United States of America

Washington, DC

iii Joined March 2009

Tweet to Donald J. Trump

17 Followers you know





















26.7M



Tweets & replies Media



Tweets

34.6K

Donald J. Trump ◎ @realDonaldTrump · 8h #ICYMI: Weekly Address

41

45.wh.gov/Jjp2ki











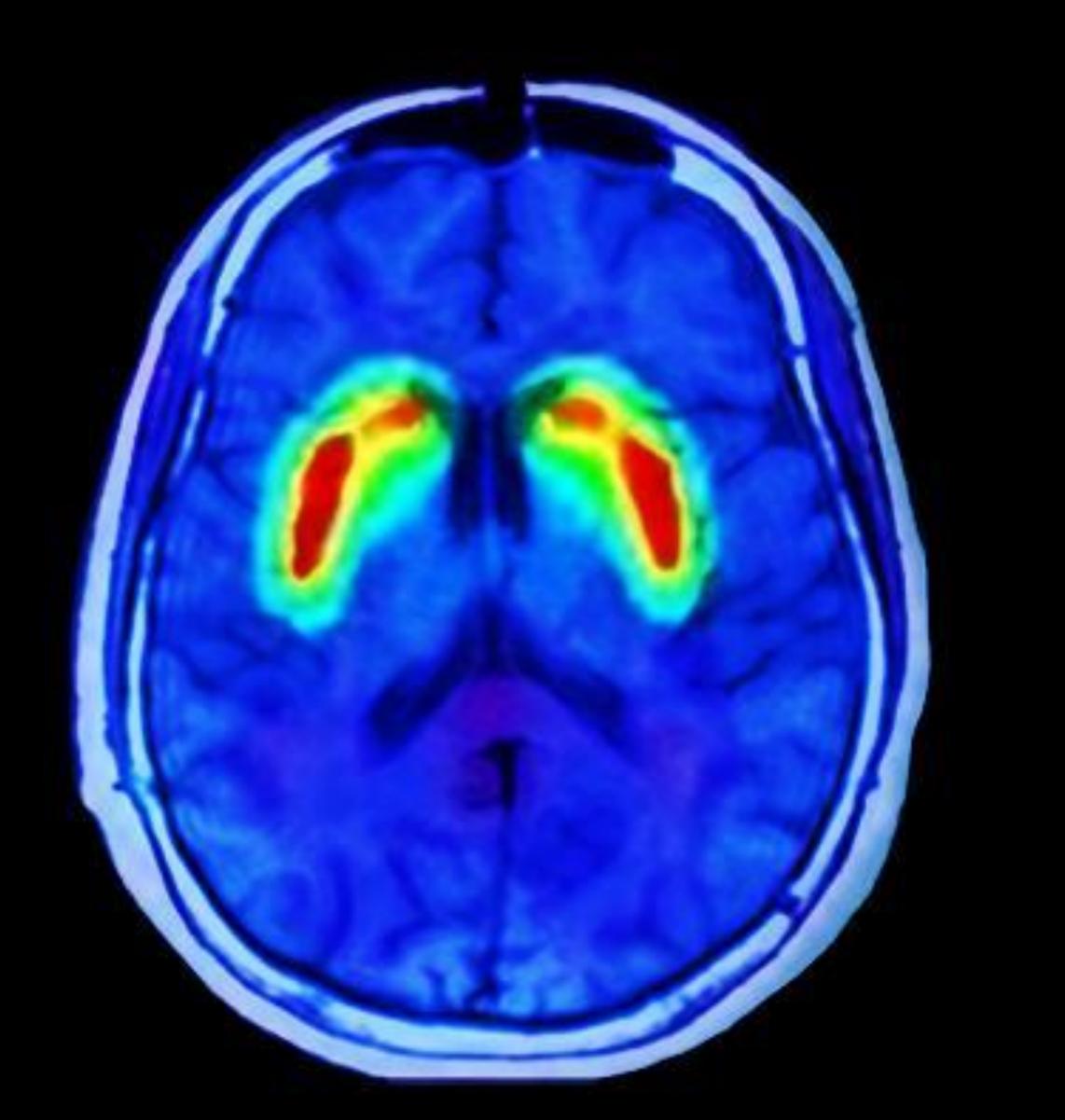
Find friends

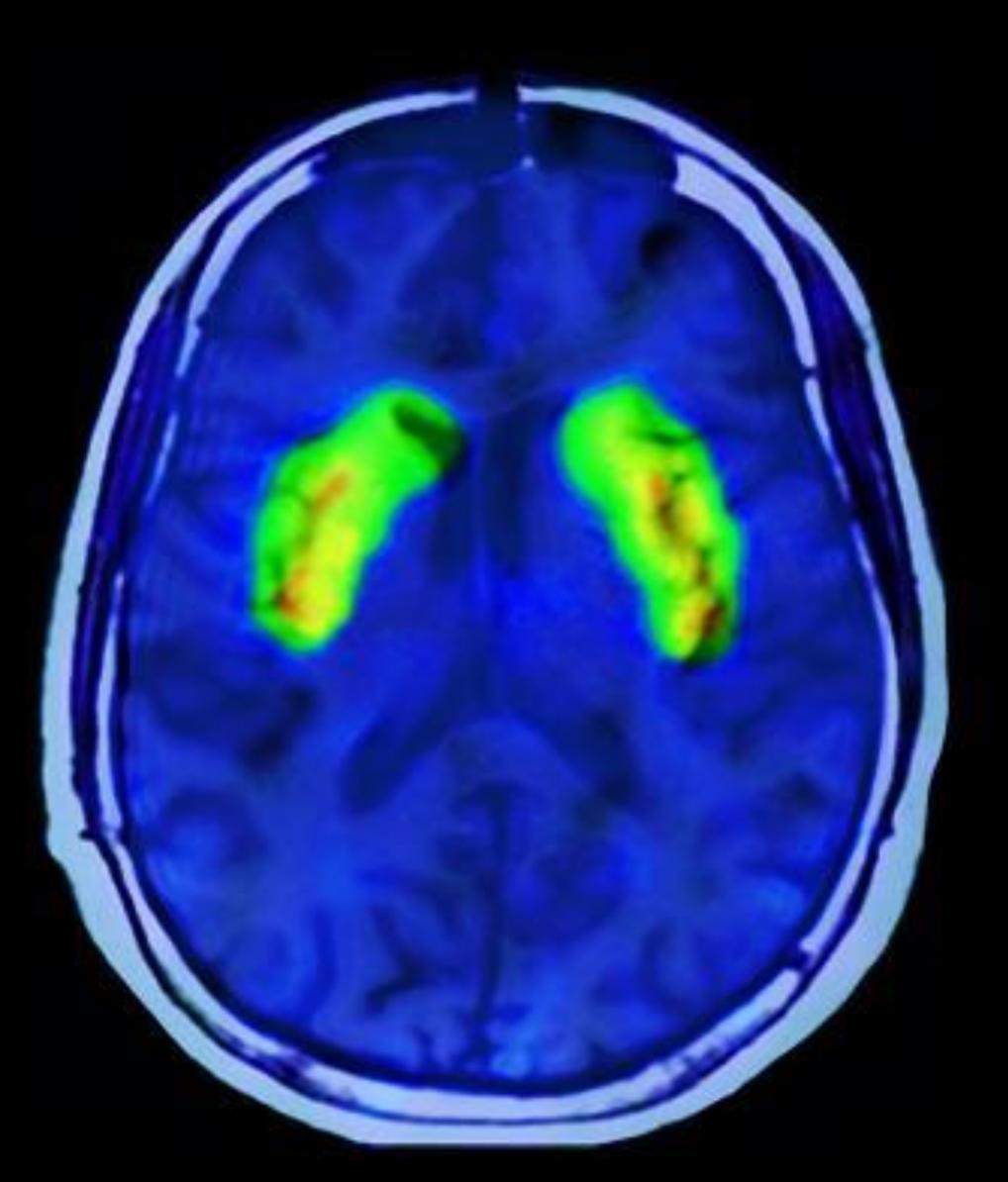
Trends · Change

#SayItWithStickers Say It with Stickers on iPhone 7.

Promoted by Apple

COGAINE







DDOS ON MEANING

election with three models

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New Mexico

North Carolina

Ohio

Pennsylvania

Utah

Virginia

Wisconsin

All states

Alabama

Alaska

Who will win the presidency?



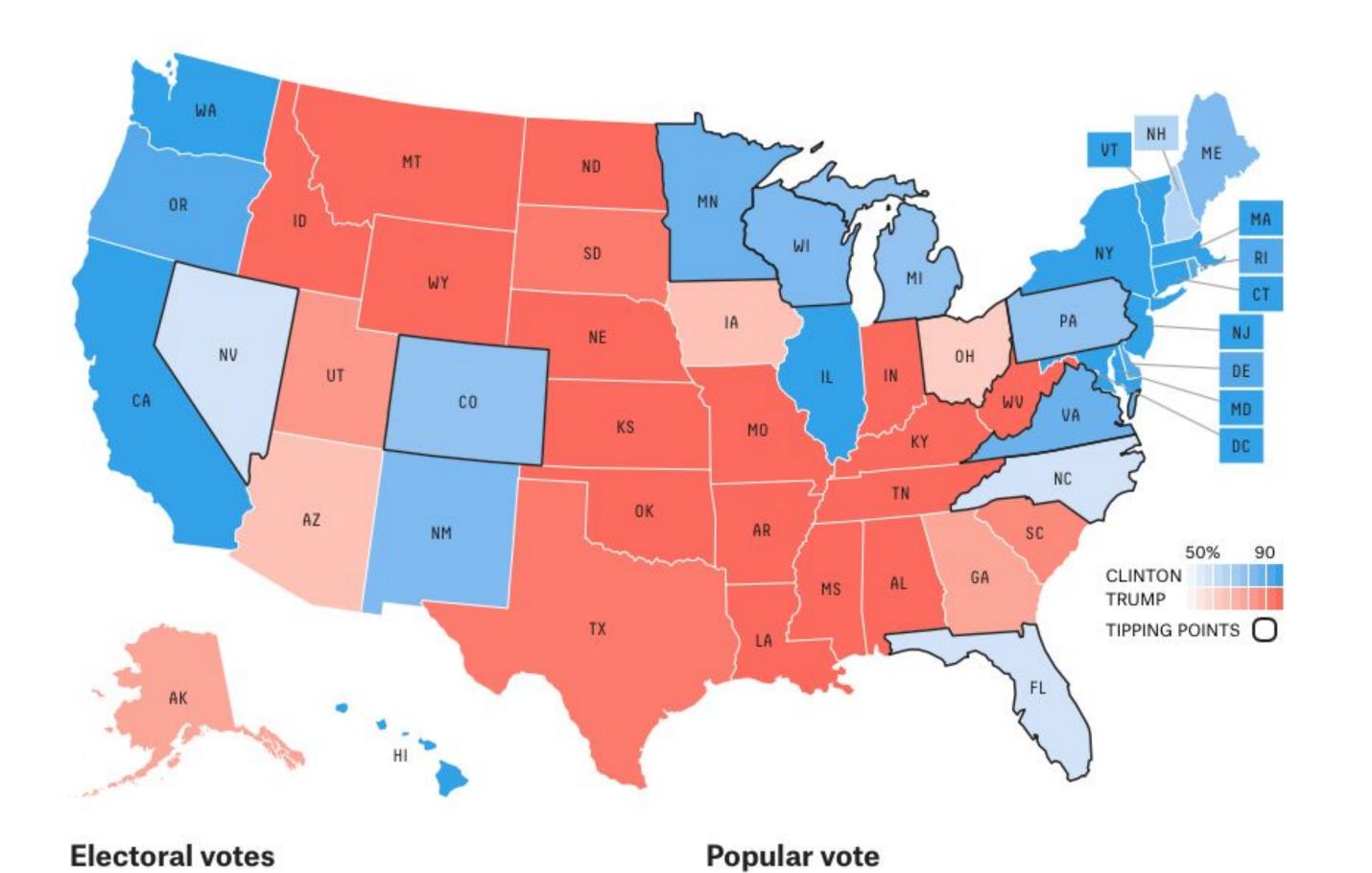
48.5%

Chance of winning

■ Hillary Clinton







302.2

Hillary Clinton

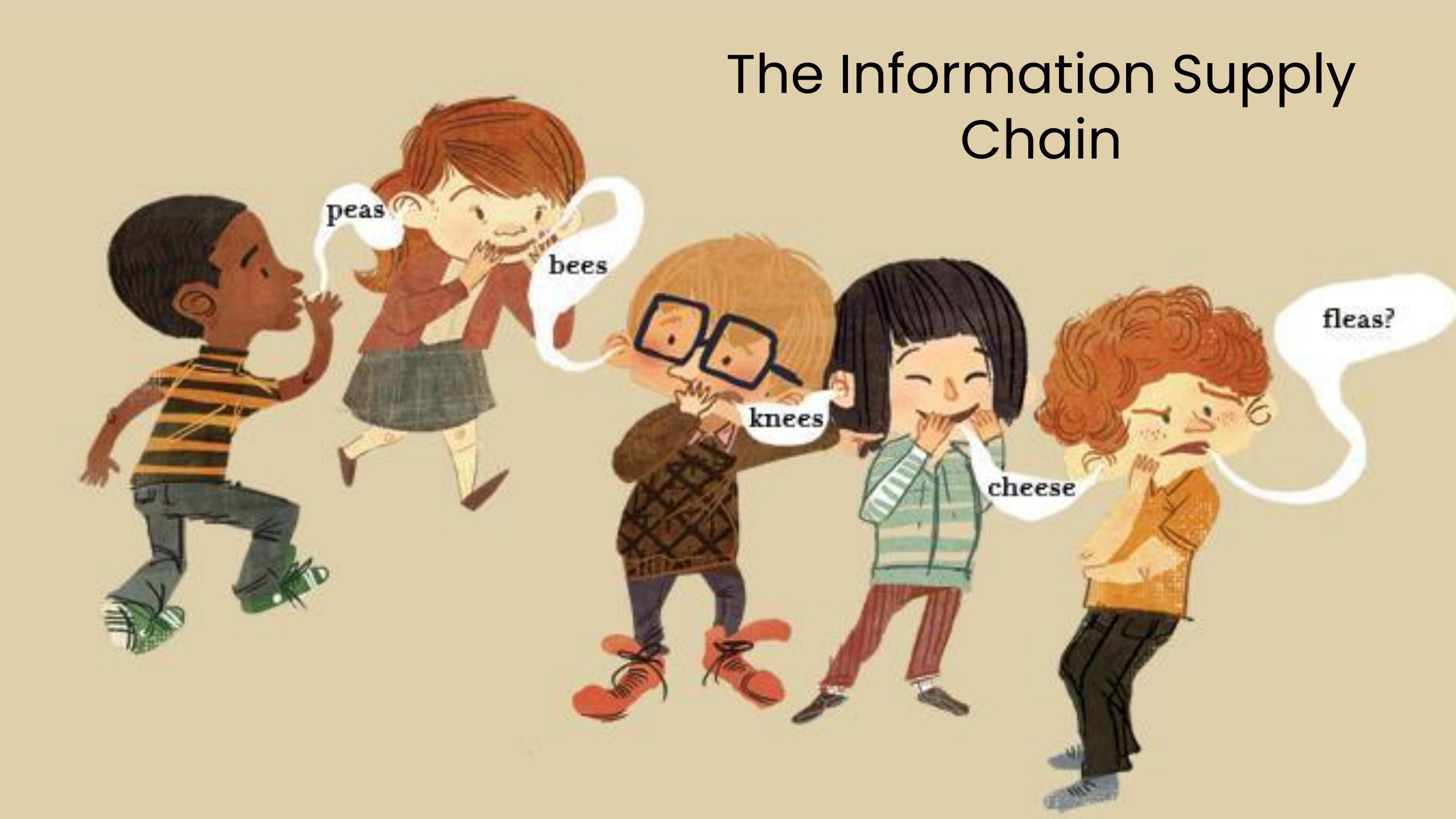
Getting good data is getting harder.



Downstream Effects

"So number one, and this kind of goes back to the supply chain, but if you're working with actually trying to manufacture something out of data, to come to some analysis or some conclusion, you have to make sure the data is good to begin with."

- Nate Silver, 2011 IAS Keynote



First principle: the data is wrong.

How to correct for wrong data?

FiveThirtyEight's Pollster Ratings

By Nate Silver

FiveThirtyEight's pollster ratings are calculated by analyzing the historical accuracy and the methodology of each firm's polls. Accuracy scores account for the type of election, a poll's sample size, the performance of other polls surveying the same race and other factors. We also calculate measures of statistical bias in the polls.

See more: The State Of The Polls, 2016 | How this works | Download the data

RATINGS	DEFINITIONS

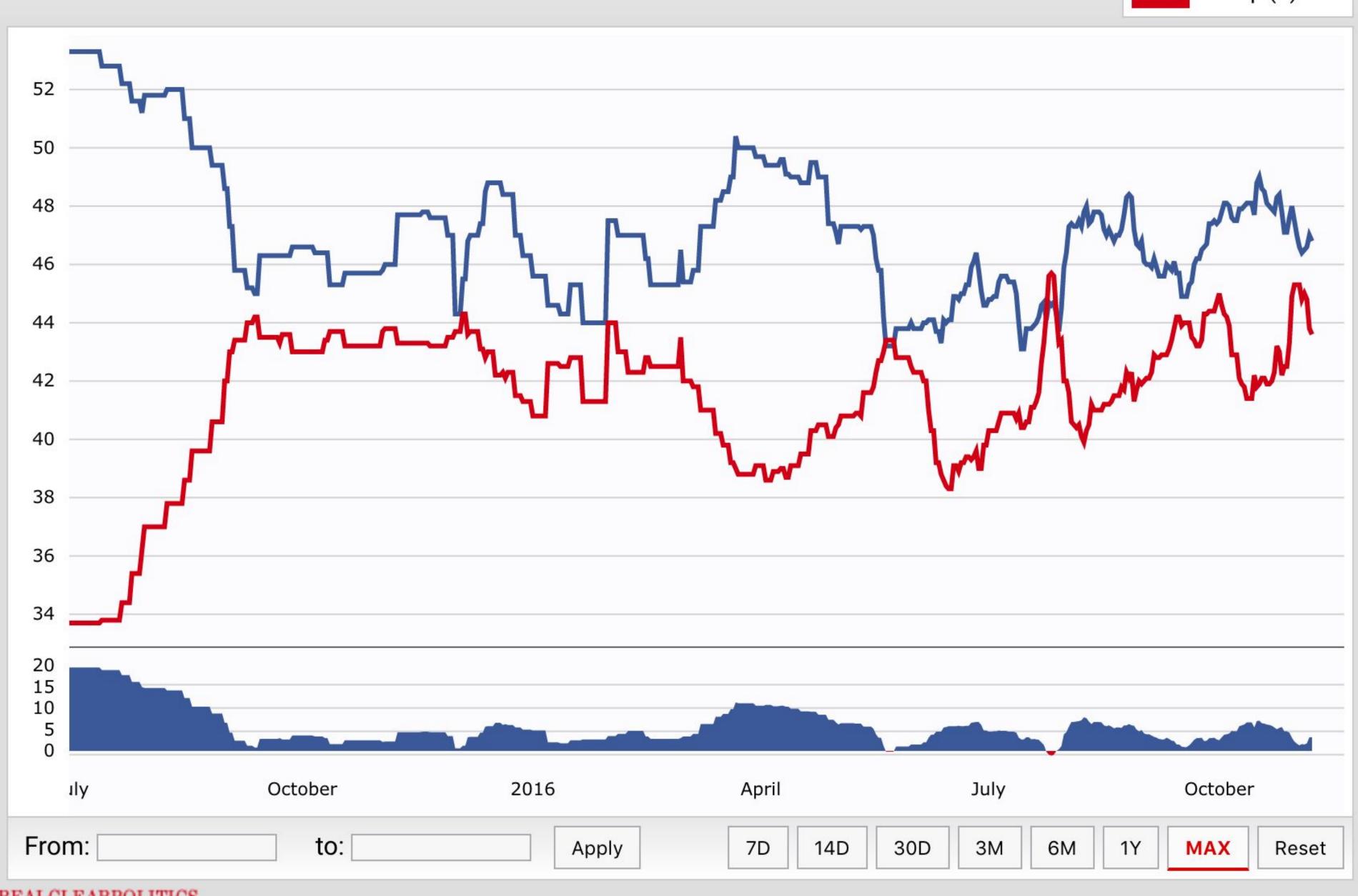
POLLSTER	LIVE CALLER WITH CELLPHONES	INTERNET	NCPP/ AAPOR/ ROPER	POLLS ANALYZED	SIMPLE AVERAGE ERROR	RACES CALLED CORRECTLY	ADVANCED +/-	PREDICTIVE +/-	538 GRADE	BANNED BY 538	MEAN-RE	VERTED BIAS
SurveyUSA			•	763	4.6	90%	-1.0	-0.8	A		D+0.1	
YouGov		•		707	6.7	93%	-0.3	+0.1	В		D+1.6	
Rasmussen Reports/ Pulse Opinion Research				657	5.3	79%	+0.4	+0.7	C+		R+2.0	
Zogby Interactive/JZ Analytics		•		465	5.6	78%	+0.8	+1.2	C-		R+0.8	
Mason-Dixon Polling & Research, Inc.	•			415	5.2	86%	-0.4	-0.2	B+		R+1.0	
Public Policy Polling				383	4.9	82%	-0.5	-0.1	B+		R+0.2	
Research 2000				279	5.5	88%	+0.2	+0.6	F	×	D+1.4	

What inputs do we trust?

Prioritizing Input

46.8 Clinton (D) +3.2

43.6 Trump (R)







FiveThirtyEight

Sports

Science & Health

Economics

Culture

Latest episode: Politics podcast

Sports

NOV. 11, 2016 AT 6:22 PM

Politics

Voter Turnout Fell, Especially In **States That Clinton Won**

By <u>Carl Bialik</u>

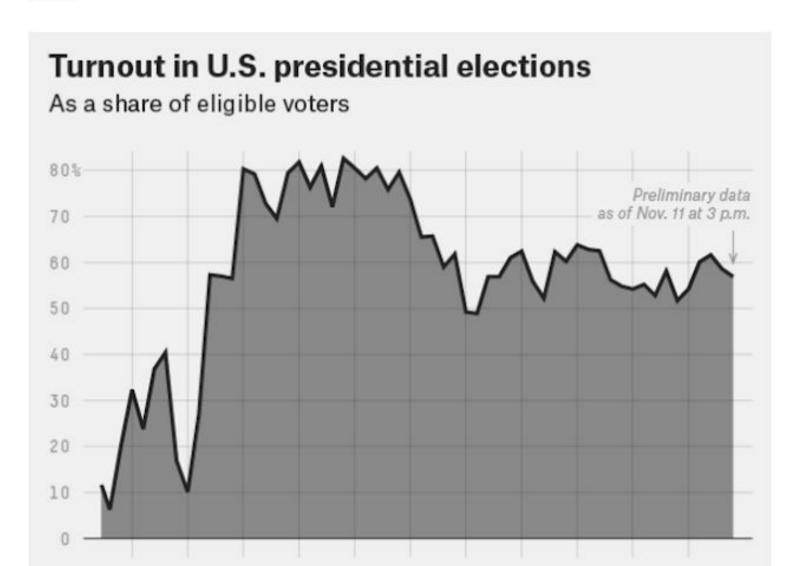
Filed under 2016 Election



This article is based on turnout figures as of 3 p.m. on Friday, Nov. 11. For more updated data, see our story from Tuesday, Nov. 15.

Early voting surged. Election Day voting plummeted. The net result: A smaller share of eligible voters cast ballots in 2016 than in either of the previous two presidential elections.

The raw number of votes rose: About 1.4 million more Americans voted in this year's election than in 2012, a total which itself was down from 2008. But the electorate was growing in the meantime: About 57 percent of eligible voters cast ballots this year, down from 58.6 percent in 2012 and 61.6 percent in 2008, which was the highest mark in 40 years. Turnout still remained well above levels for most presidential election years from 1972 to 2000.



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Latest episode: Politics pod

NOV. 15, 2016 AT 3:10 PM

No, Voter Turnout Wasn't Way Down From 2012

By Carl Bialik

Filed under 2016 Election

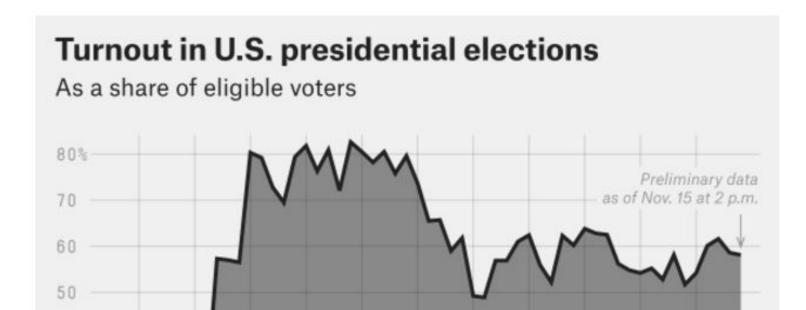






Stories are still circulating a week after the election that turnout fell sharply from 2012. That's almost certainly not true. The confusion is the result of news outlets trying to pin down voter turnout figures quickly in a system that doesn't count millions of votes until weeks after the election.

Approximately 58.1 percent of eligible voters cast ballots in last week's presidential election, according to the latest estimates from Michael McDonald, associate professor at the University of Florida, who gathers data at the U.S. Elections Project. That's down only slightly from 2012, when turnout was 58.6 percent, and well above 2000's rate of 54.2 percent. Turnout may end up being higher than in any presidential election year between 1972 and 2000. (It's already higher than in any midterm election since 1896, according to McDonald's numbers, including the paltry 35.9 percent of voters who turned out two years ago.)



Q \equiv

PewResearchCenter



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SOCIAL TRENDS

RELIGION I

INTERNET & TECH

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FACT TANK

EXPERTS

MAY 1, 2015



By International Standards, U.S. Voter Turnout is Low | Pew Research Center

By International Standards, U.S. Voter Turnout is Low

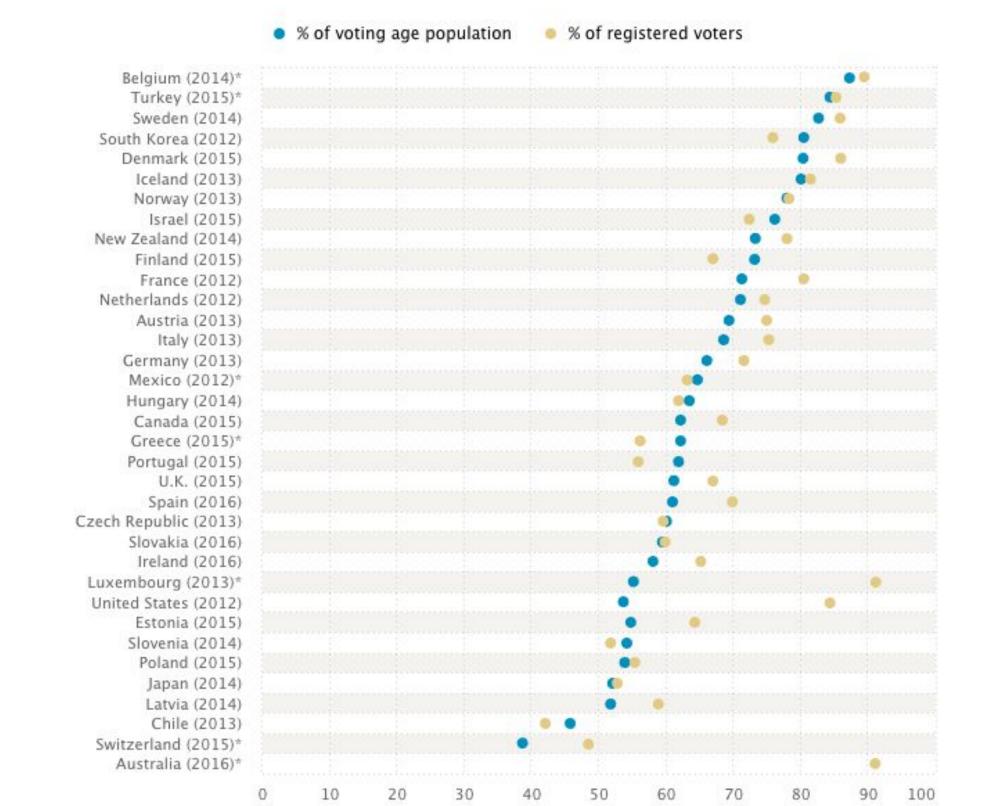
Chart

Data

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Votes cast in OECD countries' most recent national elections as a ...



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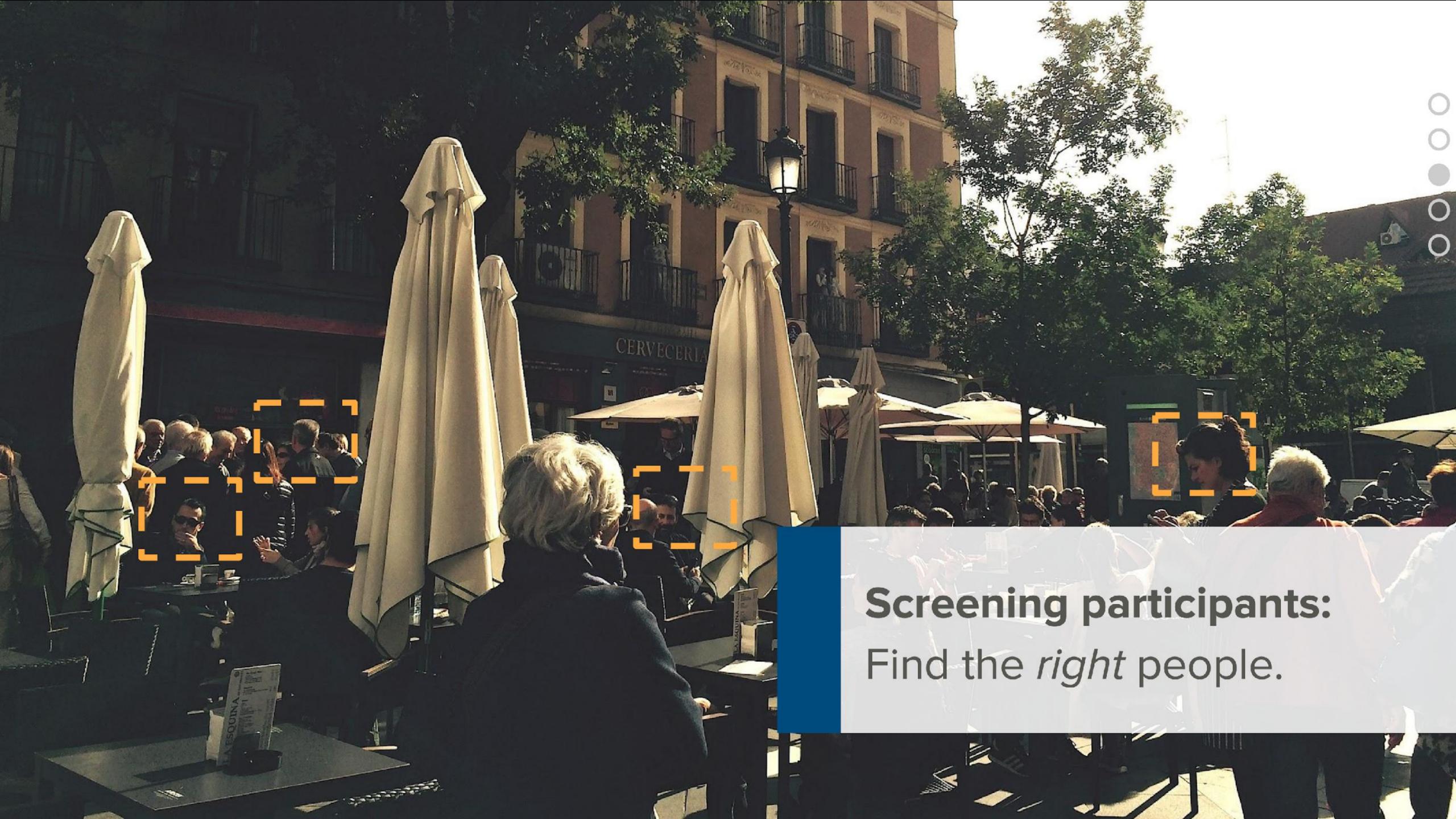
Muslims and Islam: Key findings in the U.S. and around the world

FACT TANK | 03/15/2017

Many smartphone owners don't take steps to secure device

FACT TANK | 05/11/2016

Are you in the US middle class? Try



How likely is someone to vote?

Latest polls

We've collected 80 polls in Wisconsin so far. The model weights each poll by its sample size, how recently it was conducted, and the historical accuracy and methodology of the polling firm. The model then adjusts each poll based on other factors. FiveThirtyEight's Pollster Ratings »

KEY • = NEW A = ALL ADULTS RV = REGISTERED VOTERS LV = LIKELY VOTERS V = VOTERS

DATES 	POLLSTER ♦	GRADE	SAMPLE	WEIGHT ♦	c)	IMTON	JMP 10	LEADER	ADJUSTED LEADER
OCT. 26-31	Marquette University	A	1,255 LV	3 .79	46%	40%	4%	Clinton +6	Clinton +5
NOV. 1-2	Remington		2,720 LV	3 .26	49%	41%		Clinton +8	Clinton +9
NOV. 1-2	Clarity Campaign Labs	В	1,129 LV	2.99	47%	43%	4%	Clinton +4	Clinton +5
NOV. 3-6	Gravis Marketing	В-	1,184 RV	2.84	47%	44%	3%	Clinton +3	Clinton +4
OCT. 31- NOV. 1	Public Policy Polling	B+	891 LV	2.81	48%	41%		Clinton +7	Clinton +7
NOV. 1-7	SurveyMonkey	C -	2,246 LV	2.53	44%	42%	7%	Clinton +2	Clinton +1
OCT. 31- NOV. 1	Loras College	В-	500 LV	1.62	44%	38%	7%	Clinton +6	Clinton +5
OCT. 27-28	Emerson College	В	400 LV	1.23	48%	42%	9%	Clinton +6	Clinton +7
OCT. 13-16	St. Norbert College	A -	664 LV	1.20	47%	39%	1%	Clinton +8	Clinton +5
NOV. 1-7	Google Consumer Surveys	В	914 LV	1.03	43%	31%	4%	Clinton +12	Clinton +12

FiveThirtyEight's Pollster Ratings

By Nate Silver

FiveThirtyEight's pollster ratings are calculated by analyzing the historical accuracy and the methodology of each firm's polls. Accuracy scores account for the type of election, a poll's sample size, the performance of other polls surveying the same race and other factors. We also calculate measures of statistical bias in the polls.

See more: The State Of The Polls, 2016 | How this works | Download the data

RATINGS	DEFINITIONS

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SurveyUSA			•	763	4.6	90%	-1.0	-0.8	A		D+0.1	
YouGov		•		707	6.7	93%	-0.3	+0.1	В		D+1.6	
Rasmussen Reports/ Pulse Opinion Research				657	5.3	79%	+0.4	+0.7	C+		R+2.0	
Zogby Interactive/JZ Analytics		•		465	5.6	78%	+0.8	+1.2	C-		R+0.8	
Mason-Dixon Polling & Research, Inc.	•			415	5.2	86%	-0.4	-0.2	В+		R+1.0	
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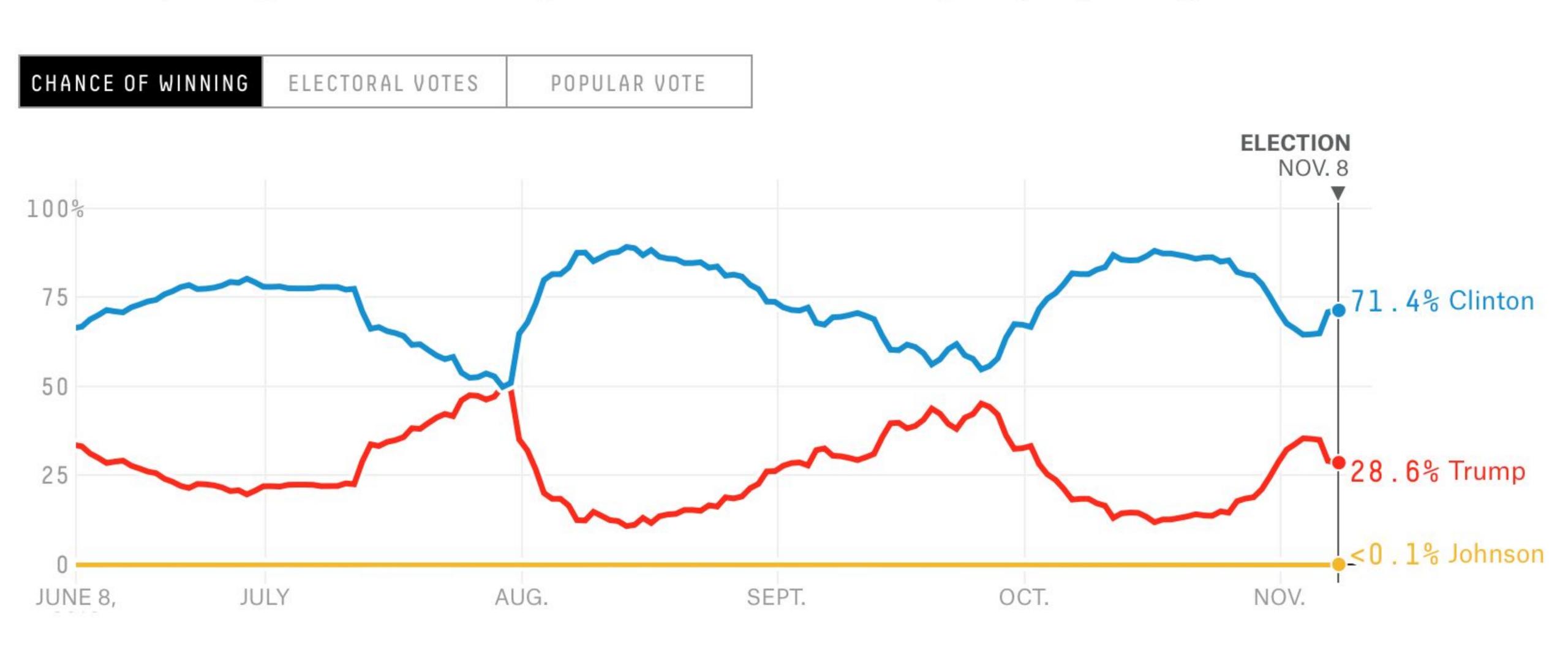
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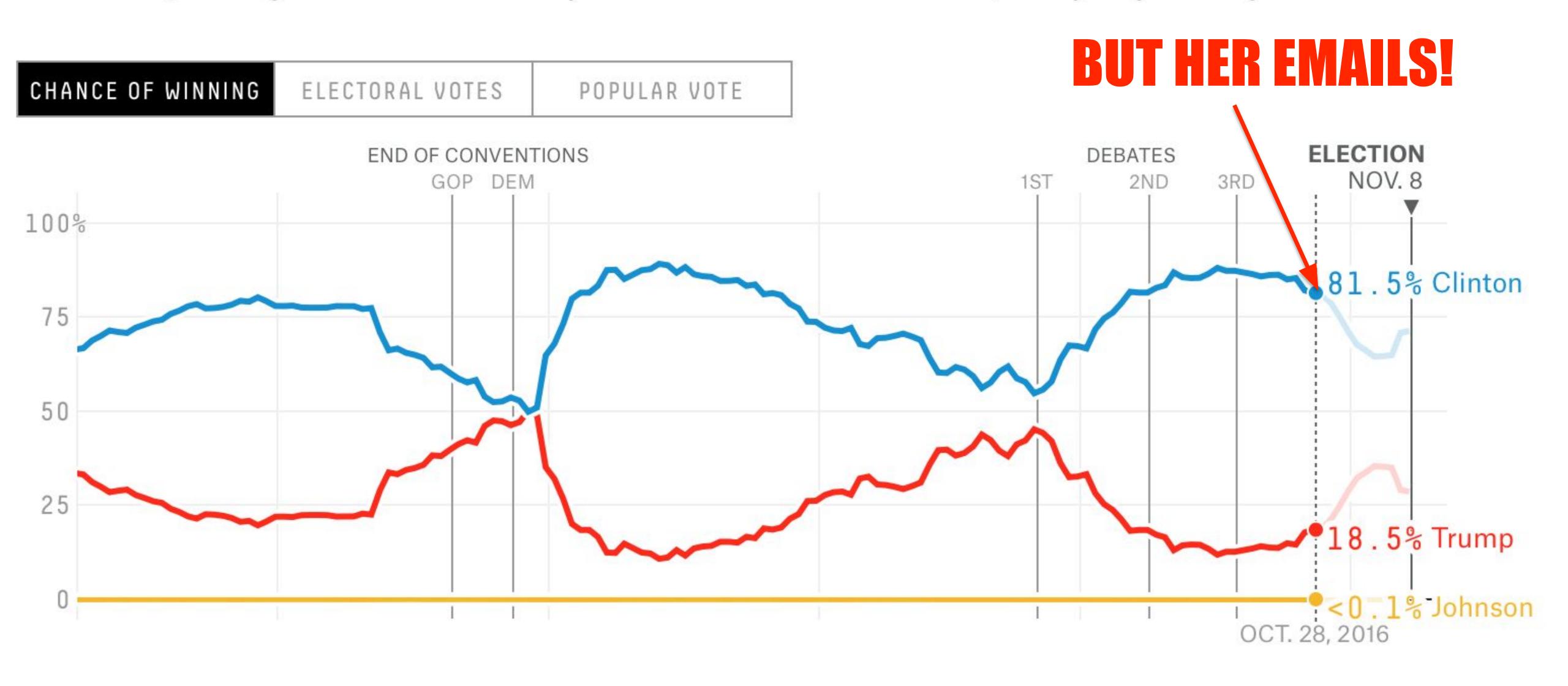
How the forecast has changed

We'll be updating our forecasts every time new data is available, every day through Nov. 8.



How the forecast has changed

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Who will win Pennsylvania?



Chance of winning Pennsylvania's 20 electoral votes

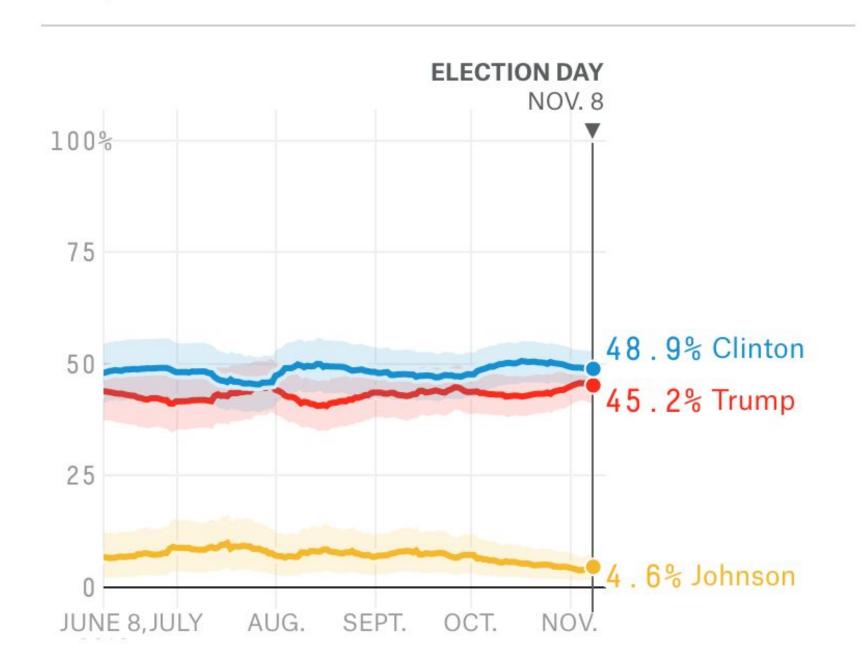


Donald Trump

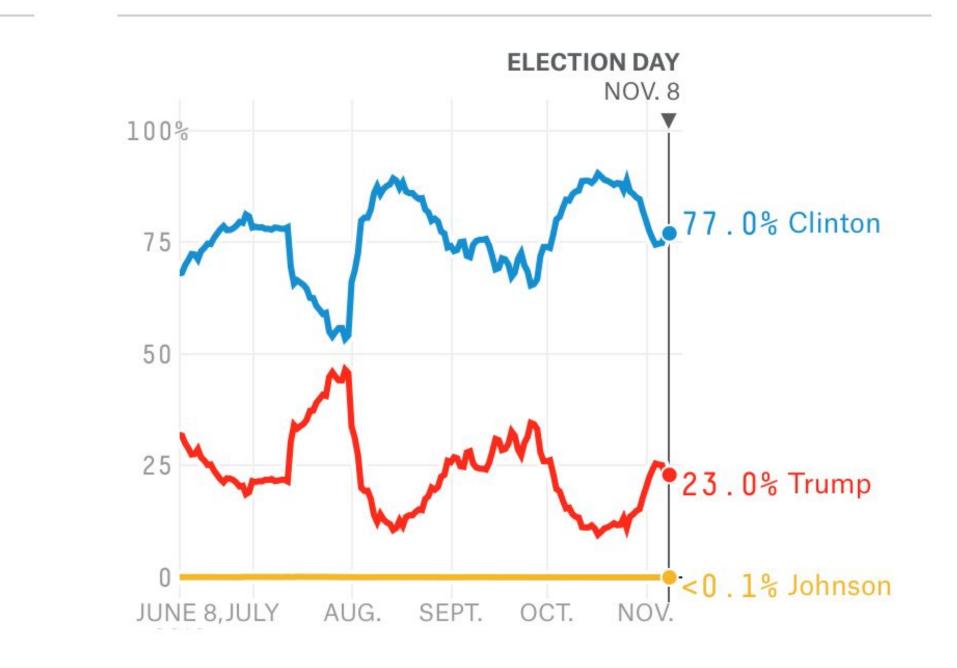
23.0%

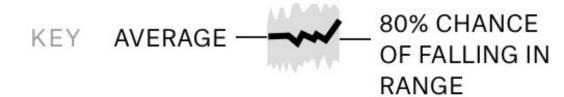


Projected vote share over time



Chances over time





Who will win Michigan?



Chance of winning Michigan's 16 electoral votes



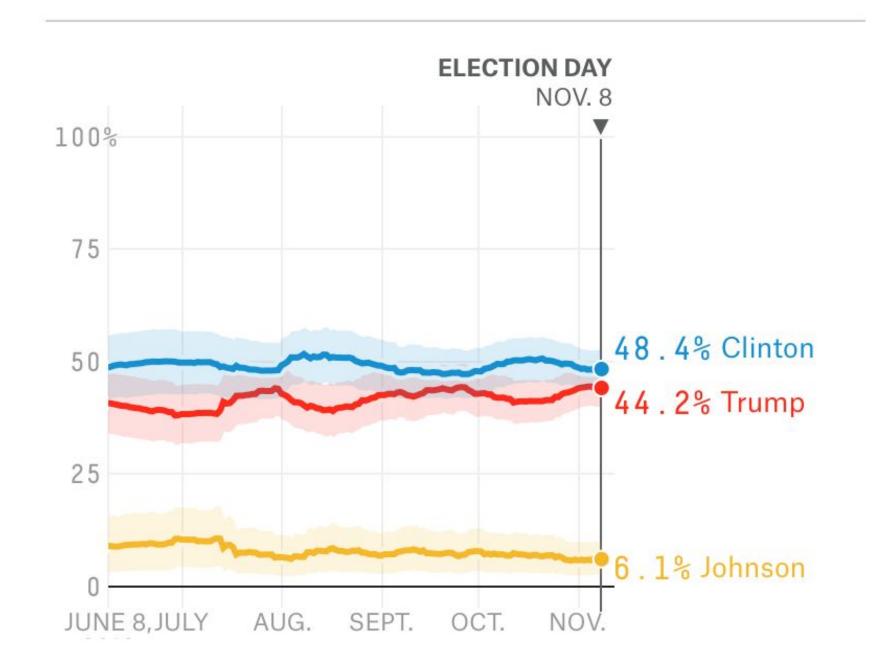
Hillary Clinton
78.9%

Donald Trump

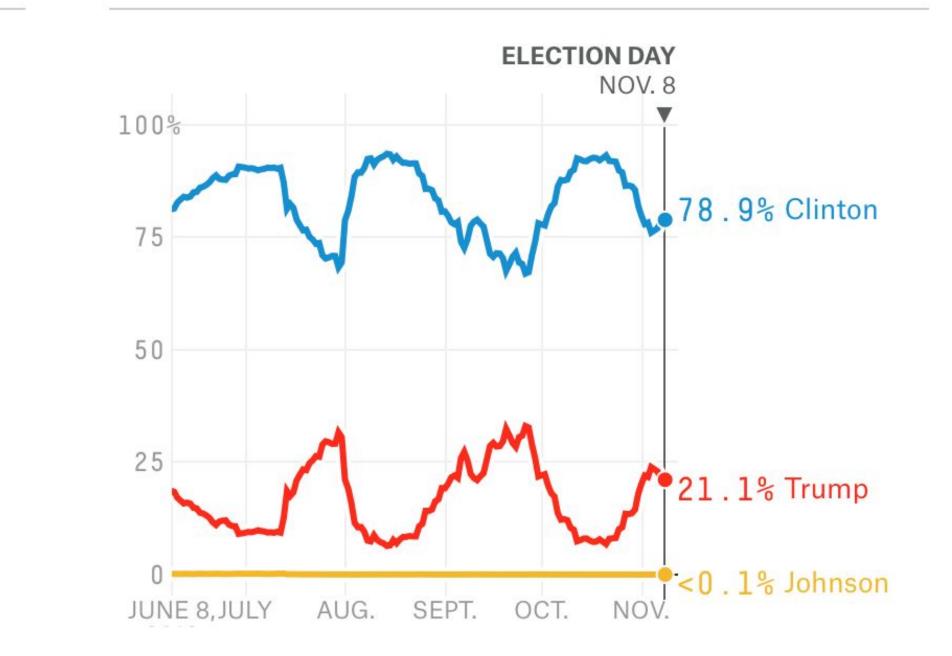
21.1%

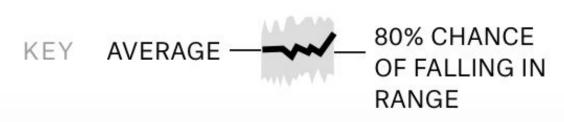


Projected vote share over time



Chances over time





Who will win Wisconsin?







Hillary Clinton

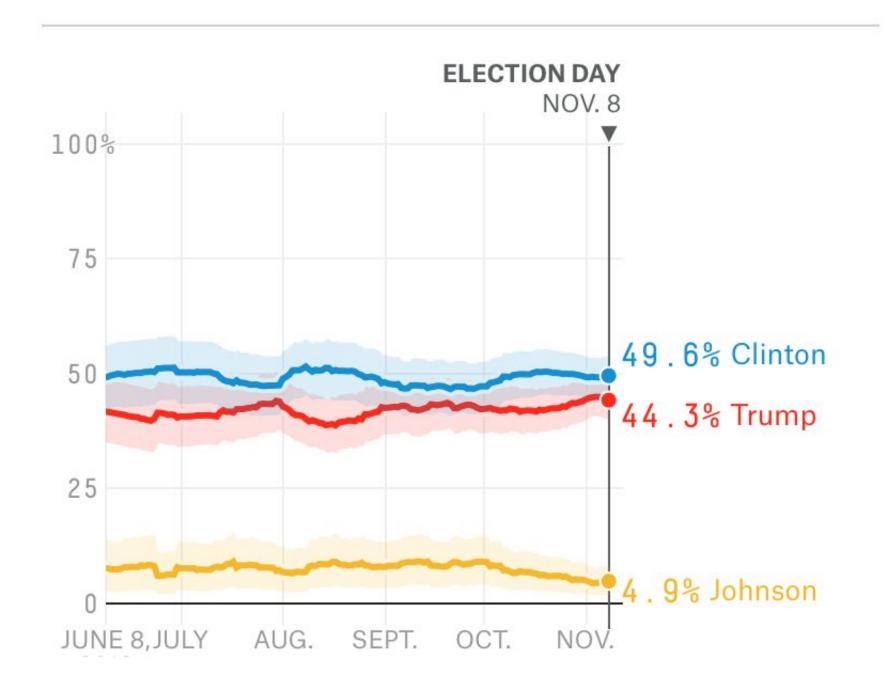
83.5%

Donald Trump

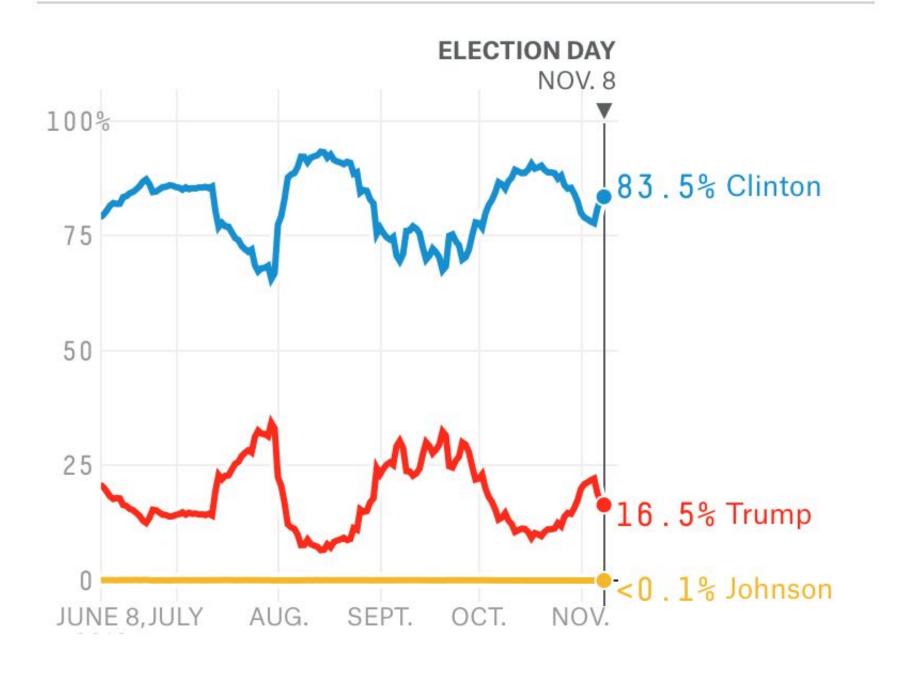
16.5%



Projected vote share over time



Chances over time



From polls to an adjusted average

	CLINTON	TRUMP	JOHNSON
1. Polling average	45.4%	41.1%	5 . 4%
Adjust for likely voters	+0.1	+0.1	-0.0
Adjust for omitted third parties	-0.1	-0.1	+0.0
Adjust for trend line	+0.3	+0.9	- 0 . 5
Adjust for house effects	-0.0	-0.2	-0.1
2. Adjusted polling average	45.7%	41.8%	4 . 8%

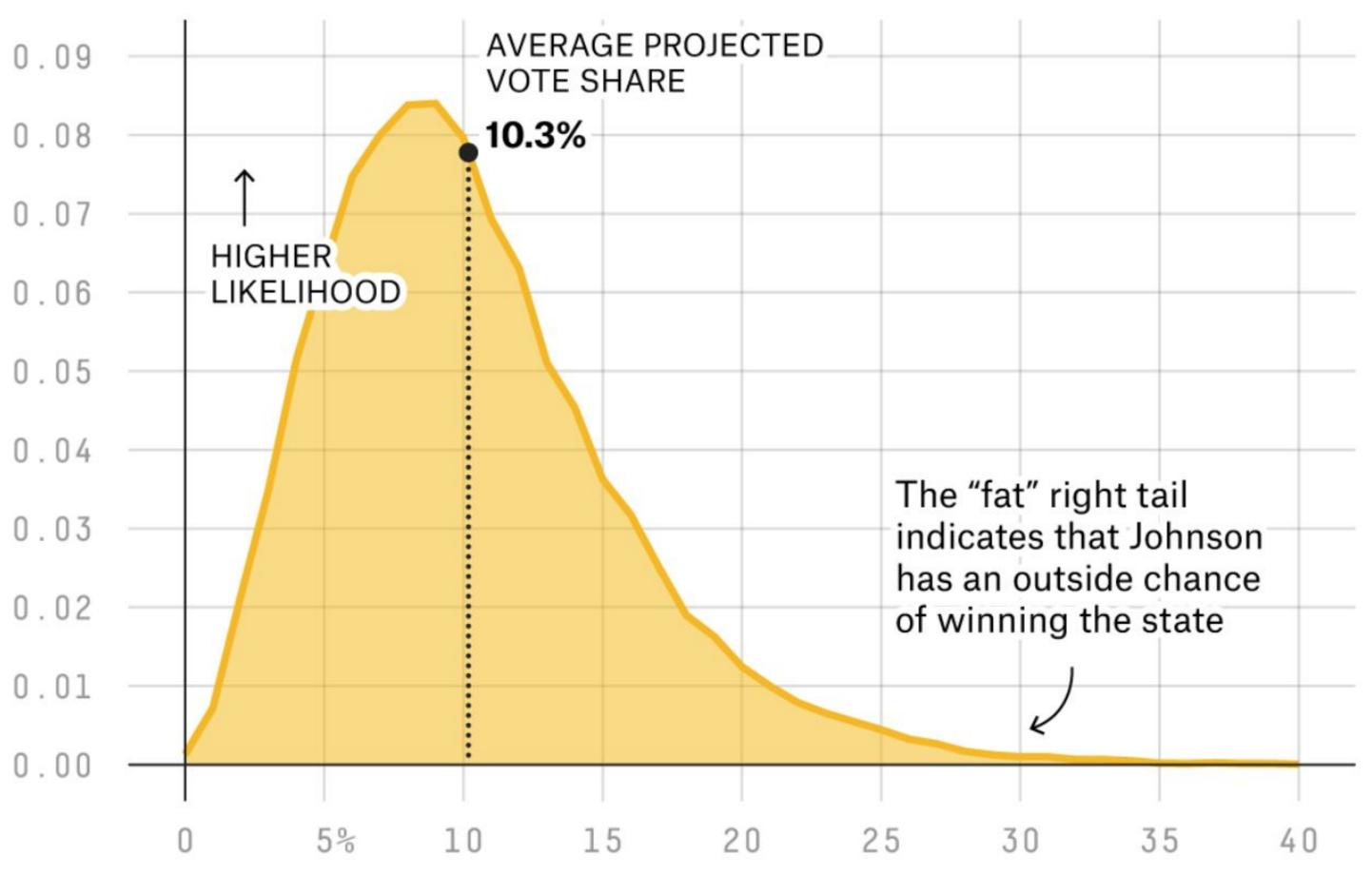






Small chance of a Johnson surge

Gary Johnson's projected vote share in New Mexico, rounded to the nearest whole percentage, polls-plus model, June 27, 2016



Share of the vote in New Mexico

Trend Line Adjustment

House Effects Adjustment

Undecideds?



Election forecasting is grounded in classic information theory.

"Information is the resolution of uncertainty." — Claude Shannon

"Findability is at the center of a quiet revolution in how we define authority, allocate trust, and make decisions."

- Peter Morville, Ambient Findability



What is your information supply chain?

We are the definers.

What can we do as information architects on the ground?

As IA's, what effect do we have on the broader information environment?

How do we give information users the ability determine quality?

What are the implications for organizations?



What are an organization's information assets?

What is the *aboutness* of your organization?

Bring the aboutness forward.

Prioritization = values.

What is our responsibility as a community?

What are our goals as a society?

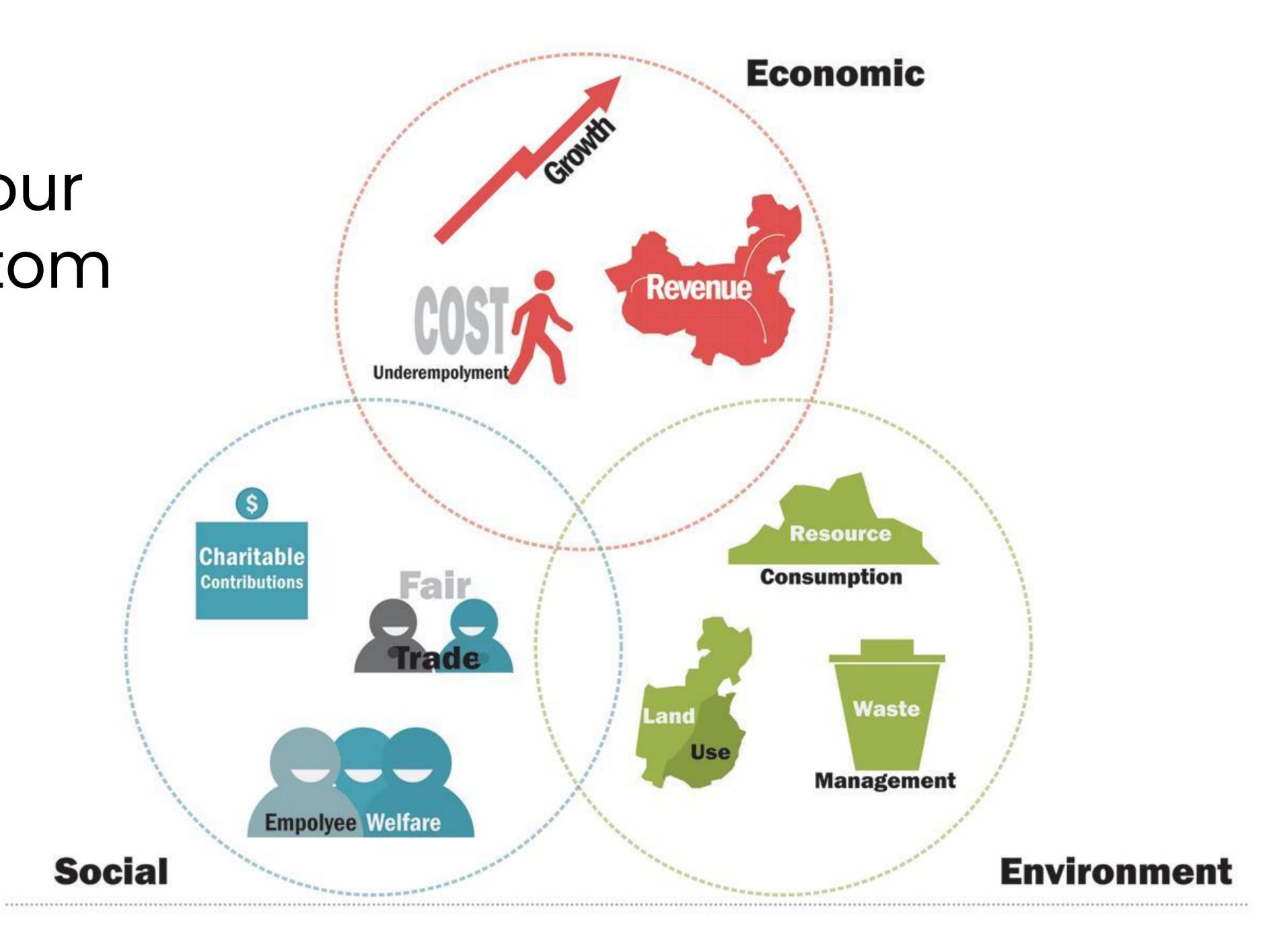
Restoring a healthy signal to noise ratio.

We need to be careful about giving up human control.

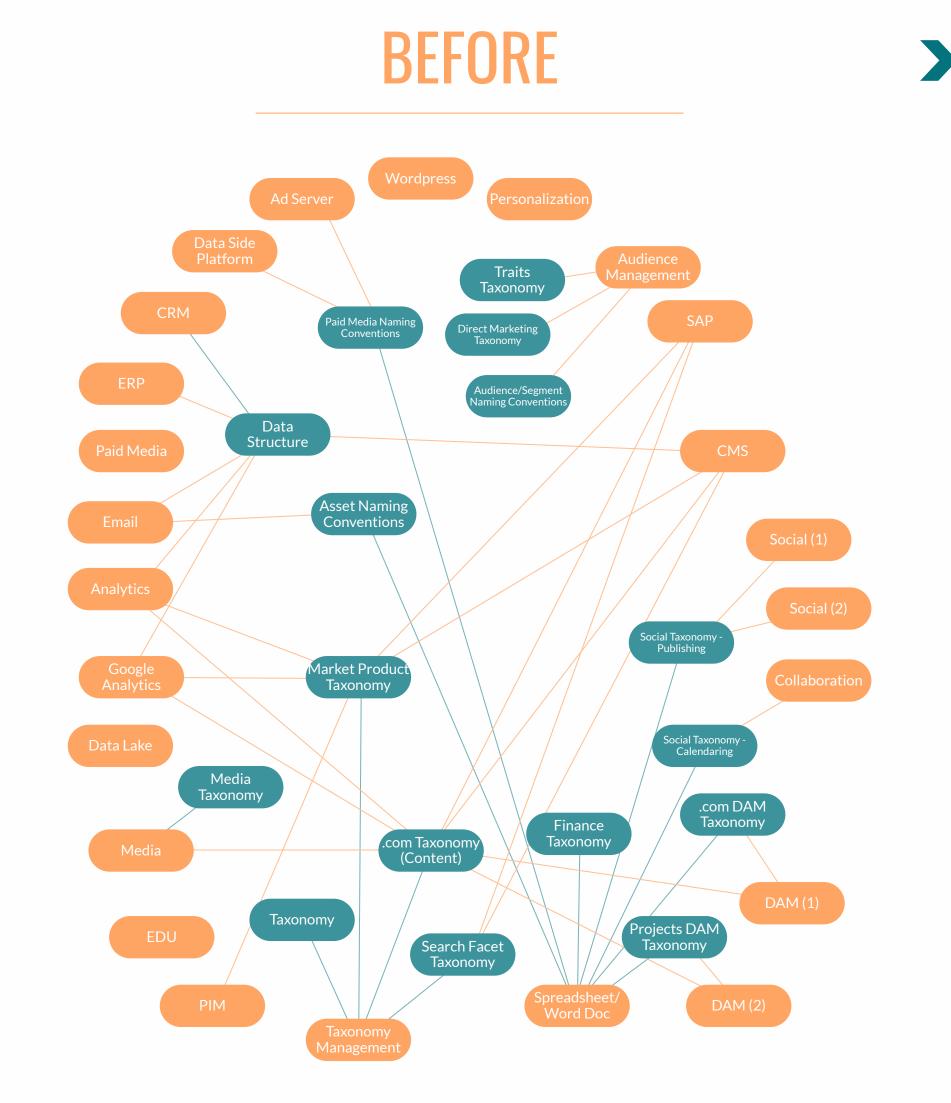
What ambient entropy do automated processes generate?

Good, Cheap, Fast? Pick two.

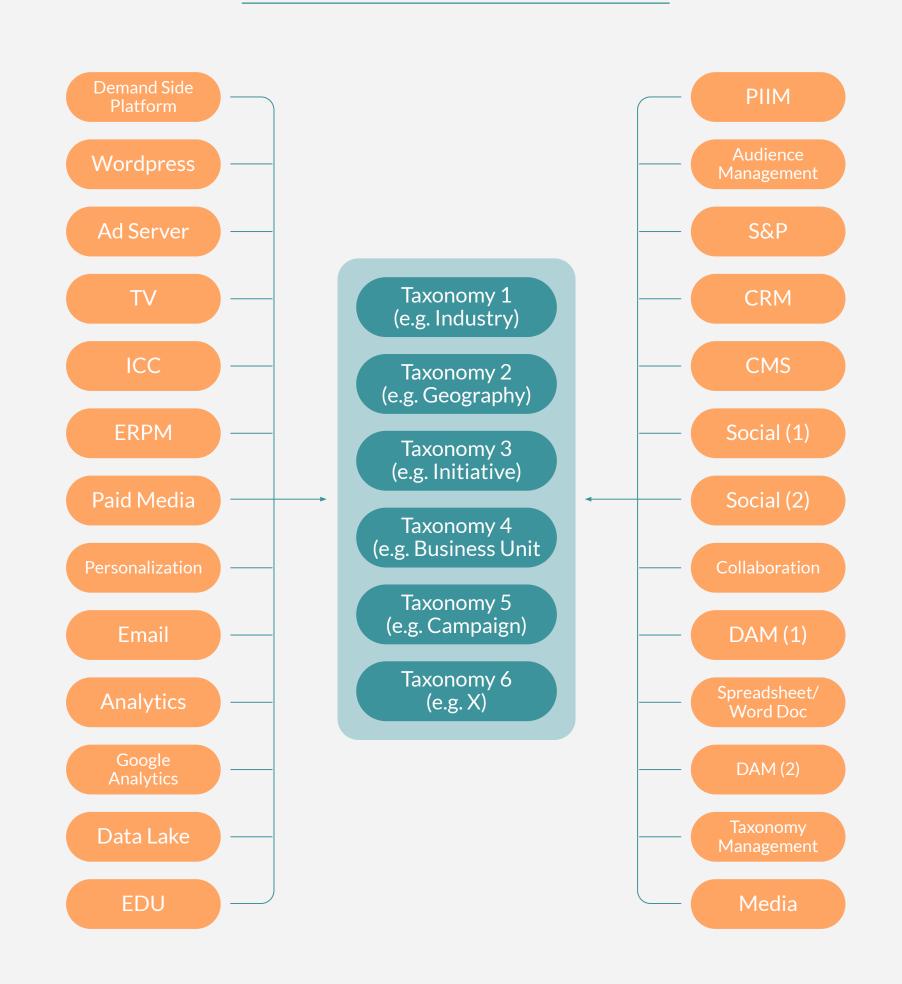
What is our triple bottom line?



ALSO IN 2017



AFTER



OUTCOMES

Client's Strategic Problems Solved:

- ✓ Adopt data-driven culture
- ✓ Scalable and sustainable insights into data
- ✓ Visibility and confidence in data
- Speed to business decisions
 - ✓ Competitive advantage

What kind of information environment do we want to live in?



Local News



LOCAL BIZ/TECH SPORTS ENTERTAINMENT LIFE TRAVEL HOMES OPINION | JOBS AUTOS SHOP ❤ All Sections

Traffic Lab Crime Local Politics Education Eastside Health Northwest Data Times Watchdog News Obituaries



Jerry Large / Columnist

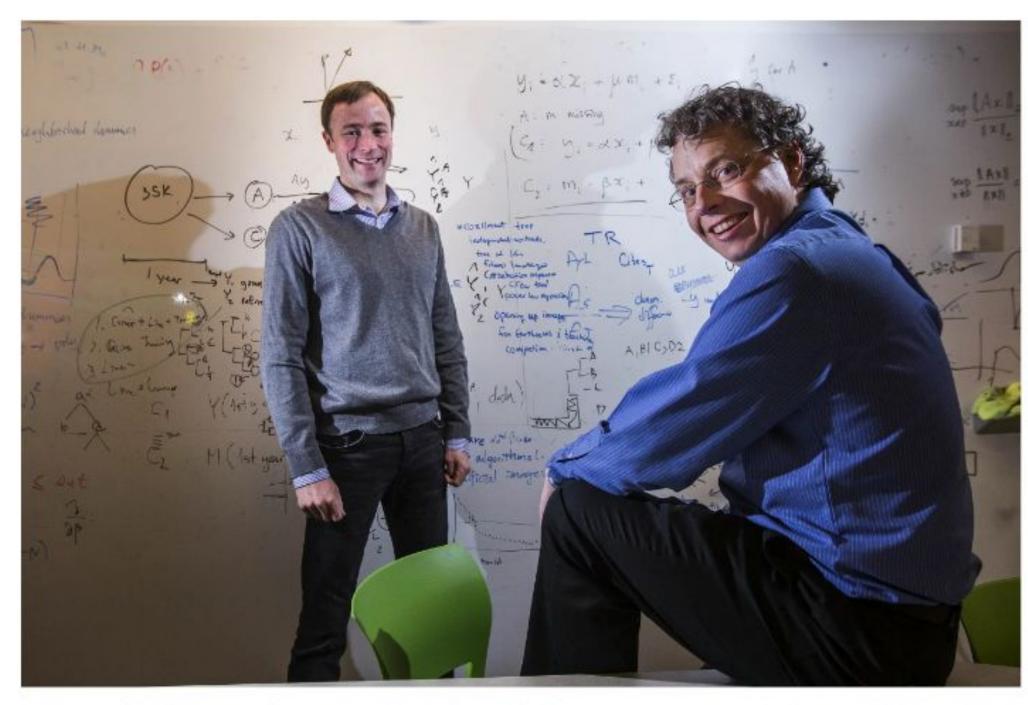
Librarians take up arms against fake news

Originally published February 6, 2017 at 6:30 am | Updated February 5, 2017 at 3:47 pm



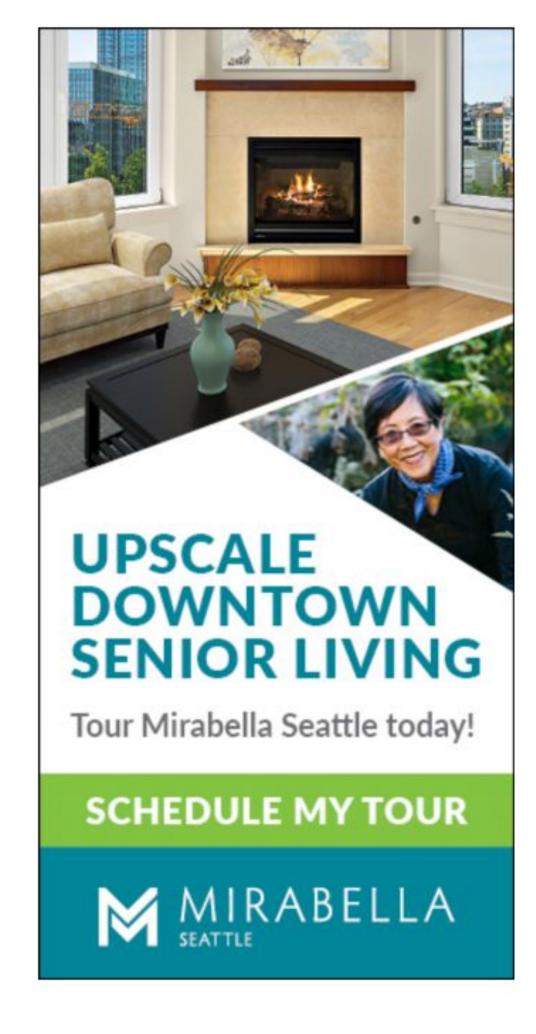
UW class on how to spot fake data goes viral within hours

Originally published January 28, 2017 at 8:00 am | Updated January 29, 2017 at 3:39 pm



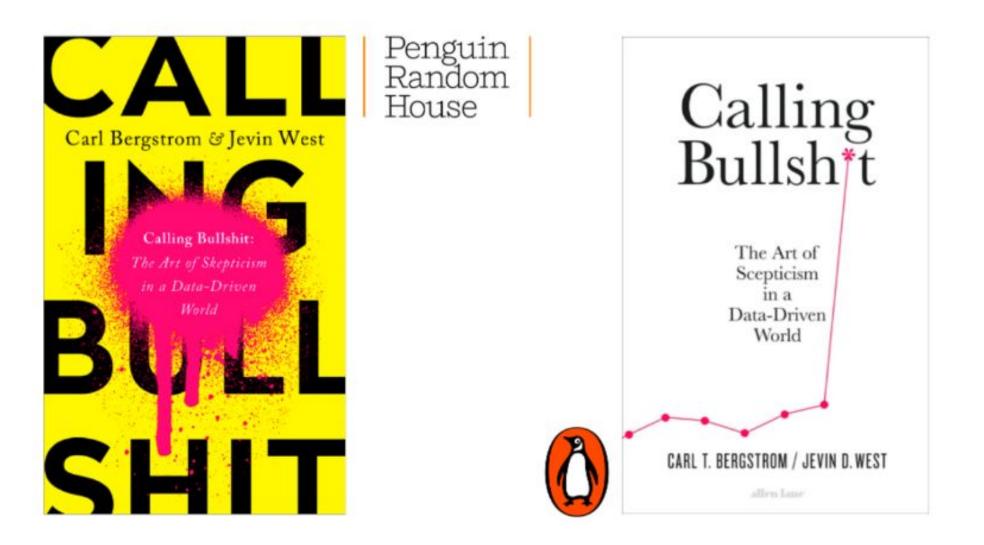
University of Washington professors Jevin West, left, and Carl Bergstrom hope to teach a class on "BS." (Dean Rutz / The Seattle Times)

Two University of Washington professors are taking aim at BS in a provocatively named new course they hope to teach this spring. The professors would like to push the course materials online — teaching it as a MOOC, for example, a freely available course taught over the web.









Now available! Calling Bullshit: The Art of Skepticism in a Data-Driven World, by Carl Bergstrom and Jevin West. <u>Available here.</u>

The world is awash in bullshit. Politicians are unconstrained by facts. Science is conducted by press release. Higher education rewards bullshit over analytic thought. Startup culture elevates bullshit to high art. Advertisers wink



Calling Bullshit: Data Reasoning in a Digital World

Logistics

Course: INFO 270 / BIOL 270. University of Washington

Next offered: Autumn Quarter 2019

Credit: 3 credits, graded
Enrollment: To be determined

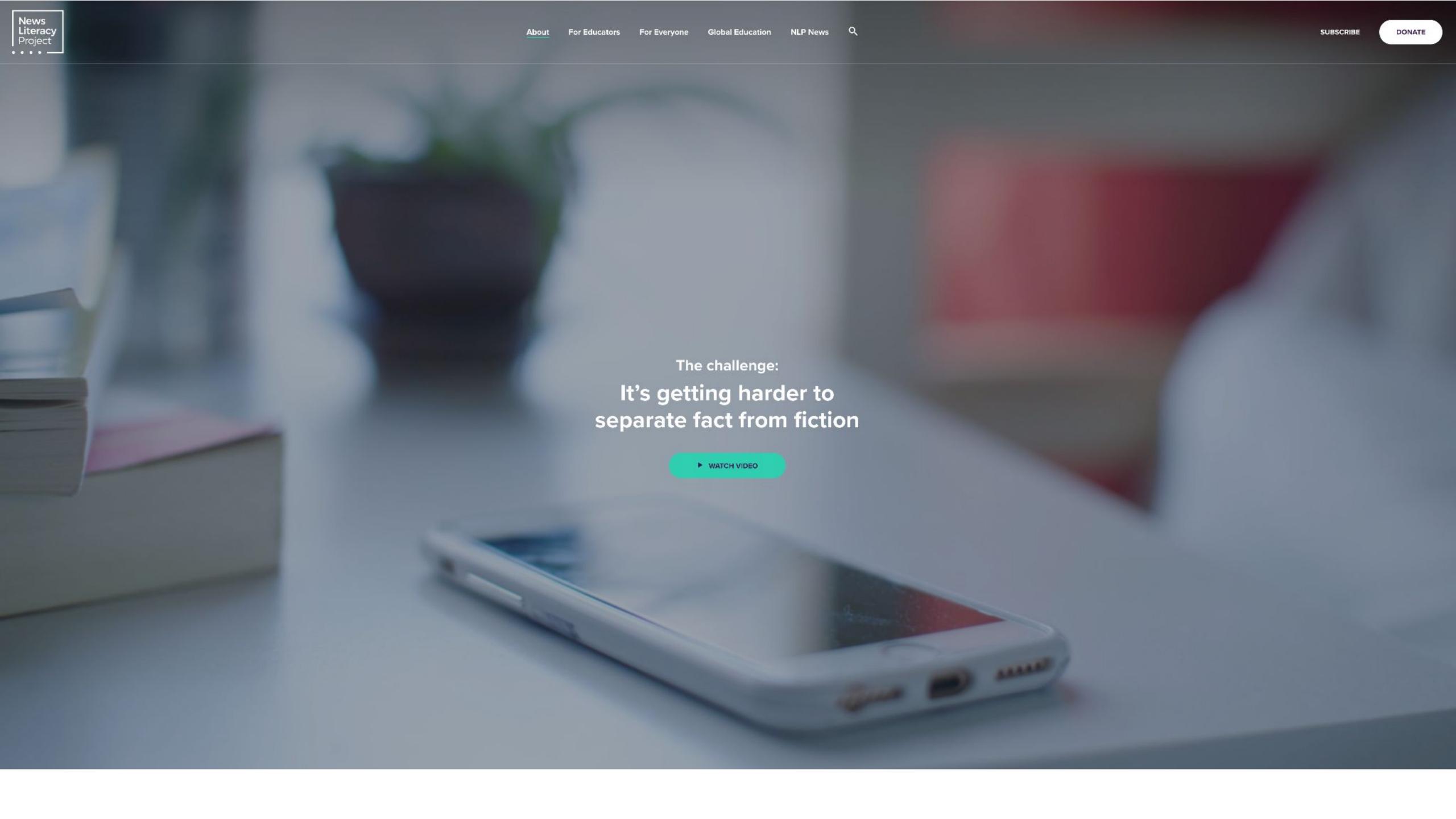
Instructors: Carl T. Bergstrom and Jevin West

Synopsis: Our world is saturated with bullshit. Learn to detect and defuse it.

Learning Objectives

Our learning objectives are straightforward. After taking the course, you should be able to:

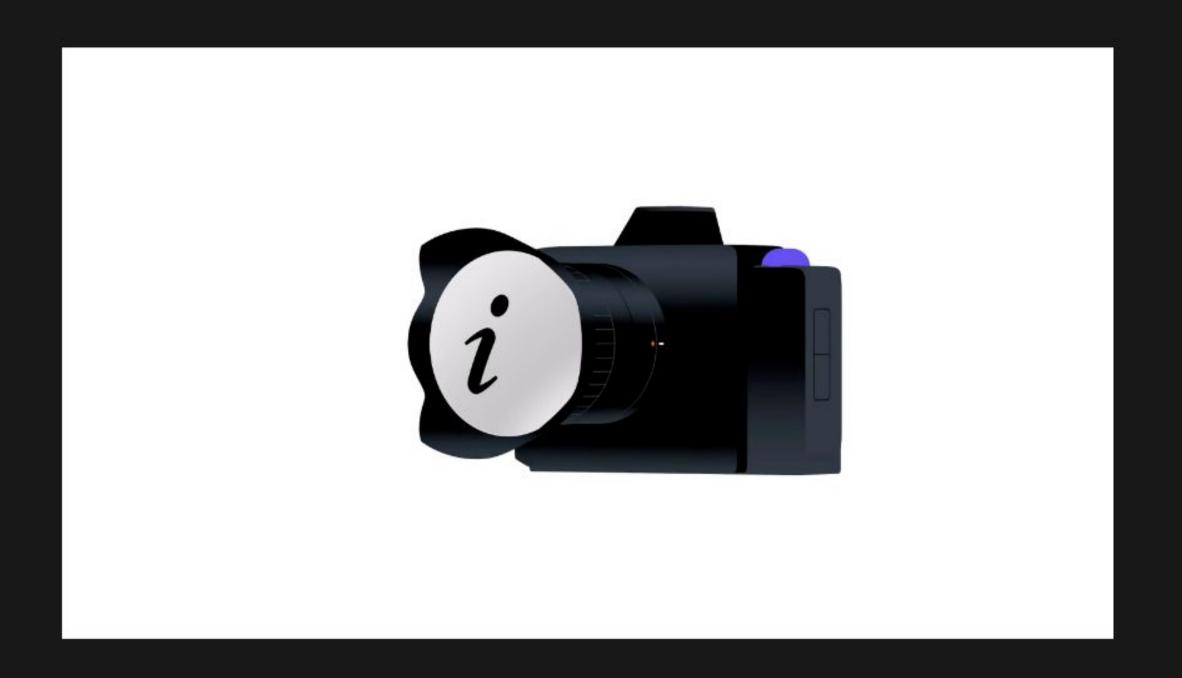
- Remain vigilant for bullshit contaminating your information diet.
- Recognize said bullshit whenever and wherever you encounter it.
- Figure out for yourself precisely why a particular bit of bullshit is bullshit.
- Provide a statistician or fellow scientist with a technical explanation of why a claim is bullshit.
- Provide your crystals-and-<u>homeopathy</u> aunt or casually racist uncle with an accessible and persuasive explanation of why a claim is bullshit.

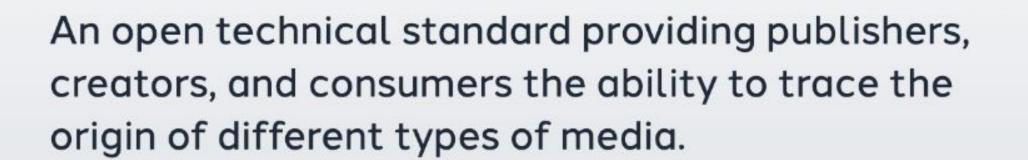


How it works

Addressing misinformation through digital content provenance.

We are a <u>community of media and tech companies, NGOs, academics, and others</u> working to promote adoption of an open industry standard for content authenticity and provenance.





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Chance 538 gave Trump of winning the presidency in 2016:

28.6%

Chance a major league baseball player would get a hit during any at-bat in 2016:

25.5%



