

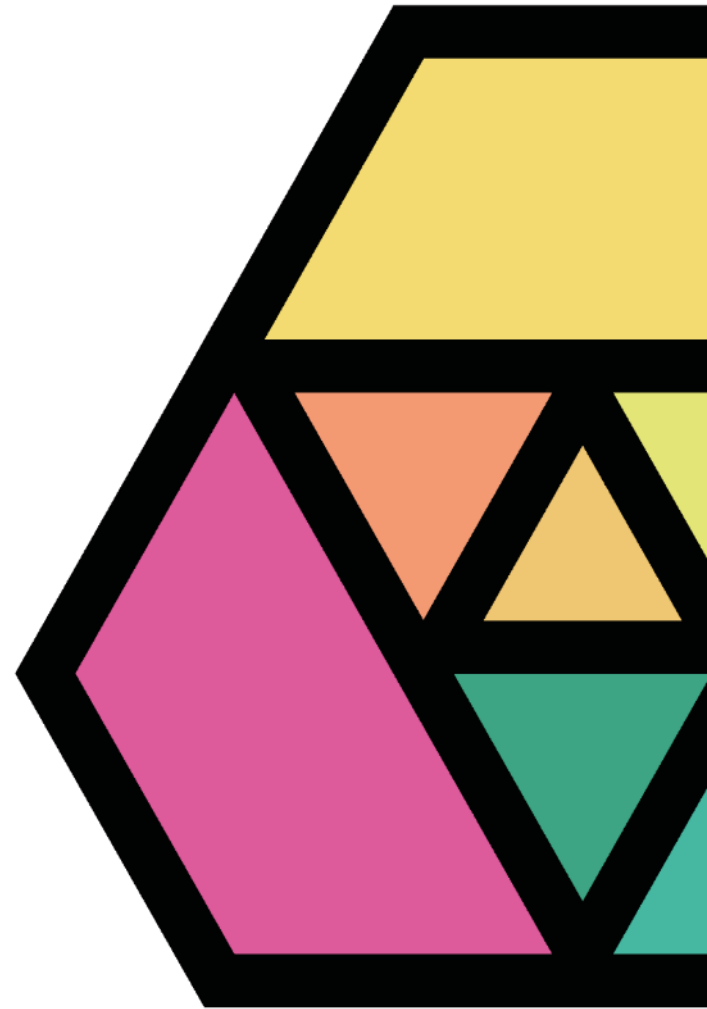


HONEYCOMB.

expect more from data

ARTIFICIAL INTELLIGENCE, OR REAL PREJUDICE?

**ASC CONFERENCE
NOVEMBER 2018**



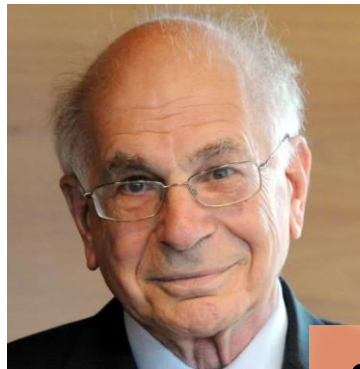
HUMANS ARE BIASED



NEGATIVITY BIAS

BEHAVIOURAL ECONOMICS

IMPLICIT ASSOCIATION TESTS



THINKING,
FAST AND SLOW



DANIEL

KAHNEMAN
SPOTLIGHT EFFECT

HALO EFFECT



Ilex Behaviour

Supported by System1 Research

M 2

HINDSIGHT BIAS



the invisible gorilla

LOSS AVERSION

Christopher Chabris and Daniel Simons

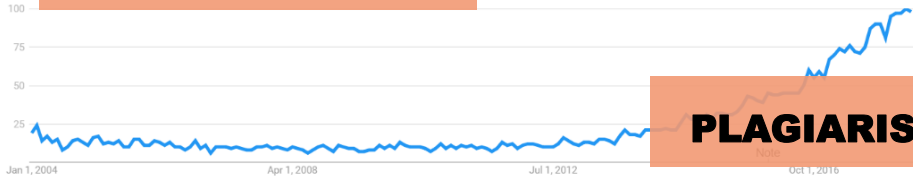
CONFIRMATION BIAS

SYSTEM 1

ARTIFICIAL INTELLIGENCE IS INCREASING



PHOTO TAGGING



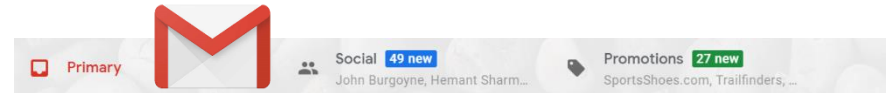
PLAGIARISM CHECKERS



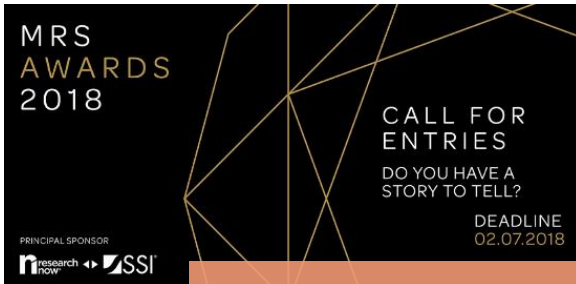
NETFLIX



VOICE RECOGNITION



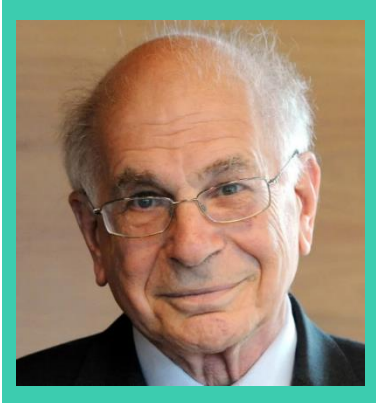
JOURNEY PLANNING



FRAUD PREVENTION

THERE WILL BE A FURTHER
28% INCREASE IN DEMAND
FOR DATA SCIENTISTS BY 2020

HUMANS vs ARTIFICIAL INTELLIGENCE



BIASED

RATIONAL

ALGORITHMIC

IRRATIONAL

RULE BASED

LOGICAL

UNPREDICTABLE

ERROR PRONE

EMOTIONAL

UNBIASED



ALTERNATIVE HYPOTHESIS



Artificial intelligence (AI) is a term for simulated **intelligence** in machines. These machines are programmed to "think" like a human and mimic the way a person acts.



Artificial Intelligence - AI Definition | Investopedia

<https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp>

ALTERNATIVE HYPOTHESIS



H_0 : ARTIFICIAL INTELLIGENCE IS UNBIASED

H_1 : ARTIFICIAL INTELLIGENCE IS BIASED



BUSINESS NEWS OCTOBER 10, 2018 / 4:12 AM / A MONTH AGO

Amazon scraps secret AI recruiting tool that showed bias against women

Jeffrey Dastin

 share



8 MIN READ



AMAZON



BIASED DATA

**BIASED REPRESENTATION
IN STEM**

**ARTIFICIAL INTELLIGENCE
REAL PREJUDICE**

AMAZON



BIASED DATA

**BIASED REPRESENTATION
IN STEM**

**ARTIFICIAL INTELLIGENCE
REAL PREJUDICE**



**ALREADY IN
PRODUCTION**

**COULDN'T UNLEARN
THE BIAS**

CAR INSURANCE



CAR INSURANCE

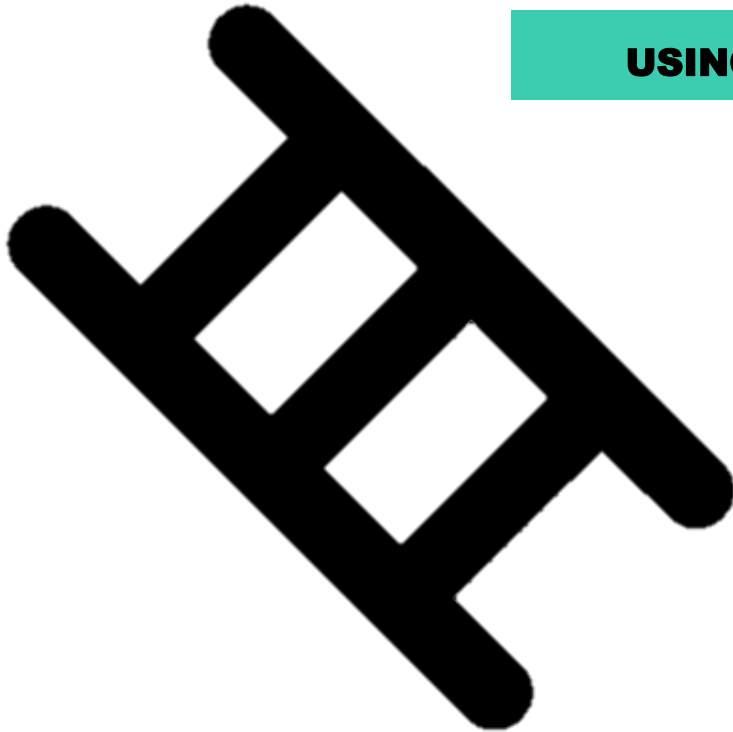


COMPENSATING FOR REAL PREJUDICE

USING REAL DATA

**CONSTRUCTION JOBS
HIGHER CAR VALUE
HIGHER PREVIOUS CLAIMS
LONGER / LATER DRIVING
BEHAVIOURS**

**ARTIFICIAL INTELLIGENCE
REAL PREJUDICE**



CAR INSURANCE



COMPENSATING FOR REAL PREJUDICE

USING REAL DATA



BREXIT

CONSTRUCTION JOBS
HIGHER CAR VALUE
HIGHER PREVIOUS CLAIMS
LONGER / LATER DRIVING
BEHAVIOURS



ETHICS:

**18% OF WOMEN & 66% OF
MEN THINK THIS IS FAIR**

ARTIFICIAL INTELLIGENCE
REAL PREJUDICE

ALONG WITH MANY OTHERS...



**AUTOMATIC
TRANSLATION**



**Women
Should Be in
The Kitchen**

IMAGE RECOGNITION

**JOB
RECOMMENDATIONS**





5345345034903486893485092485035304590943058203453

why are black women so



why are black women so **angry**

why are black women so **loud**

why are black women so **mean**

why are black women so **attractive**

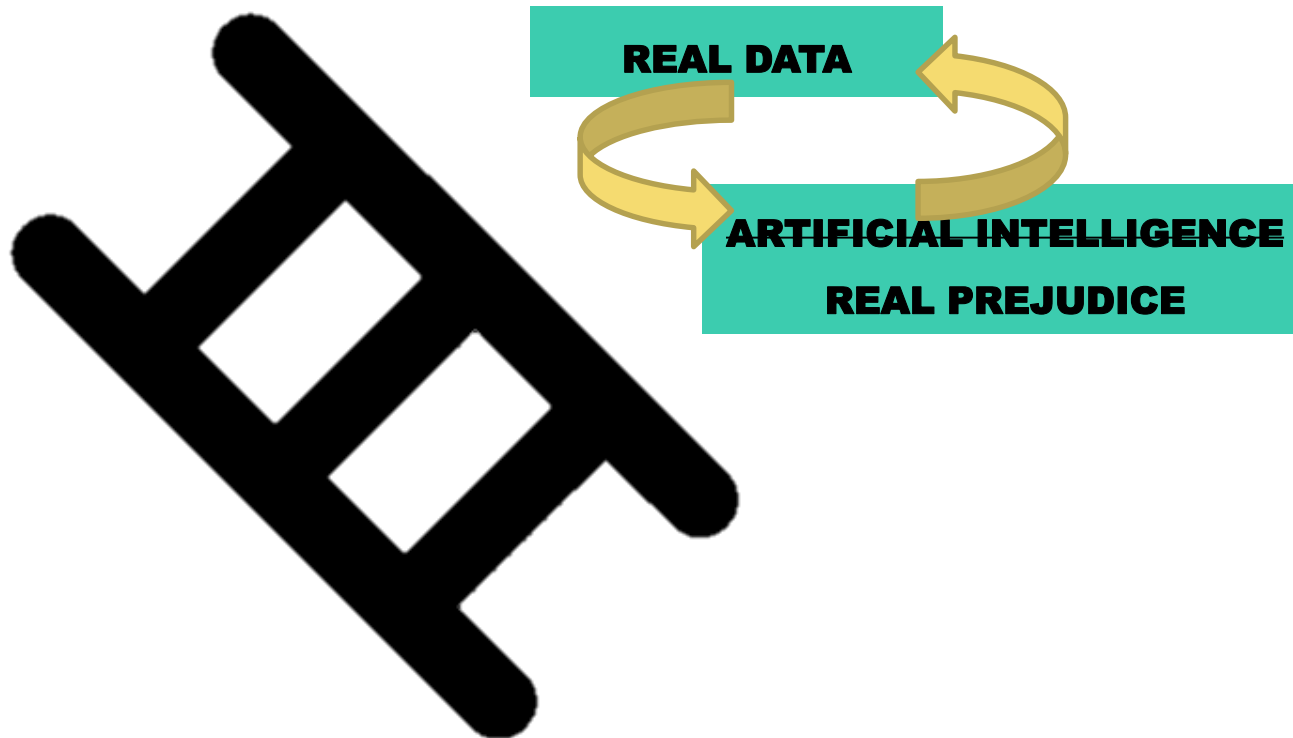
why are black women so **lazy**

why are black women so **annoying**

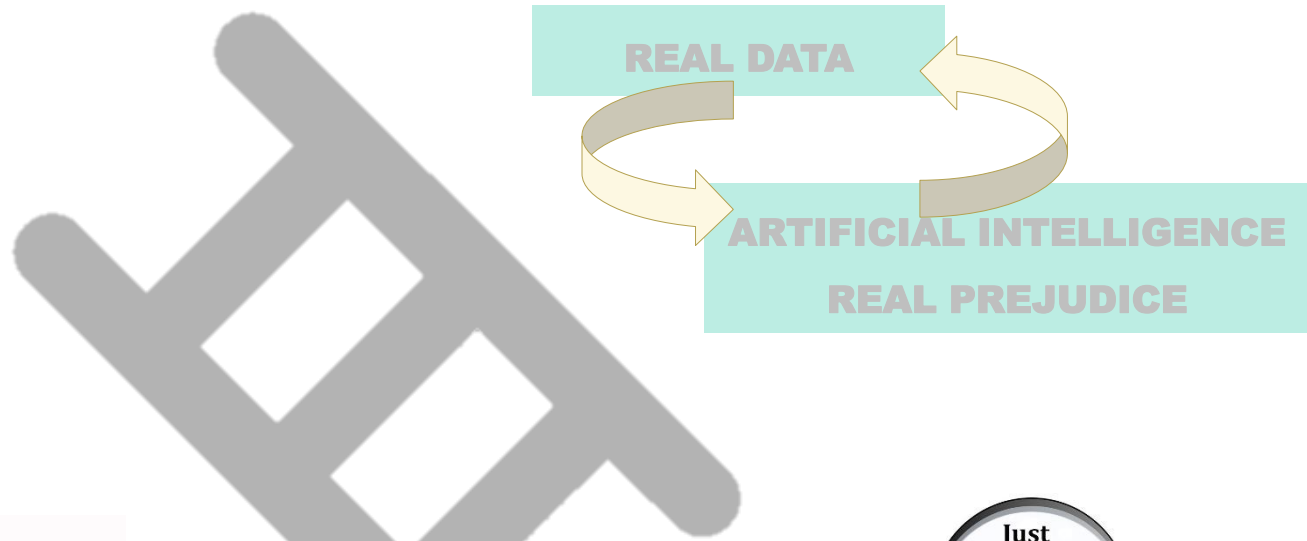
why are black women so **confident**

why are black women so **sassy**

why are black women so **insecure**



GOOGLE



REPUTABLE SOURCE OF INFORMATION



RE-OFFENDING



APPENDIX A

List of Jurisdiction-Specific Risk Assessment Instruments

**BLACK OFFENDERS ARE
MORE LIKELY TO RE-OFFEND
THAN WHITE**

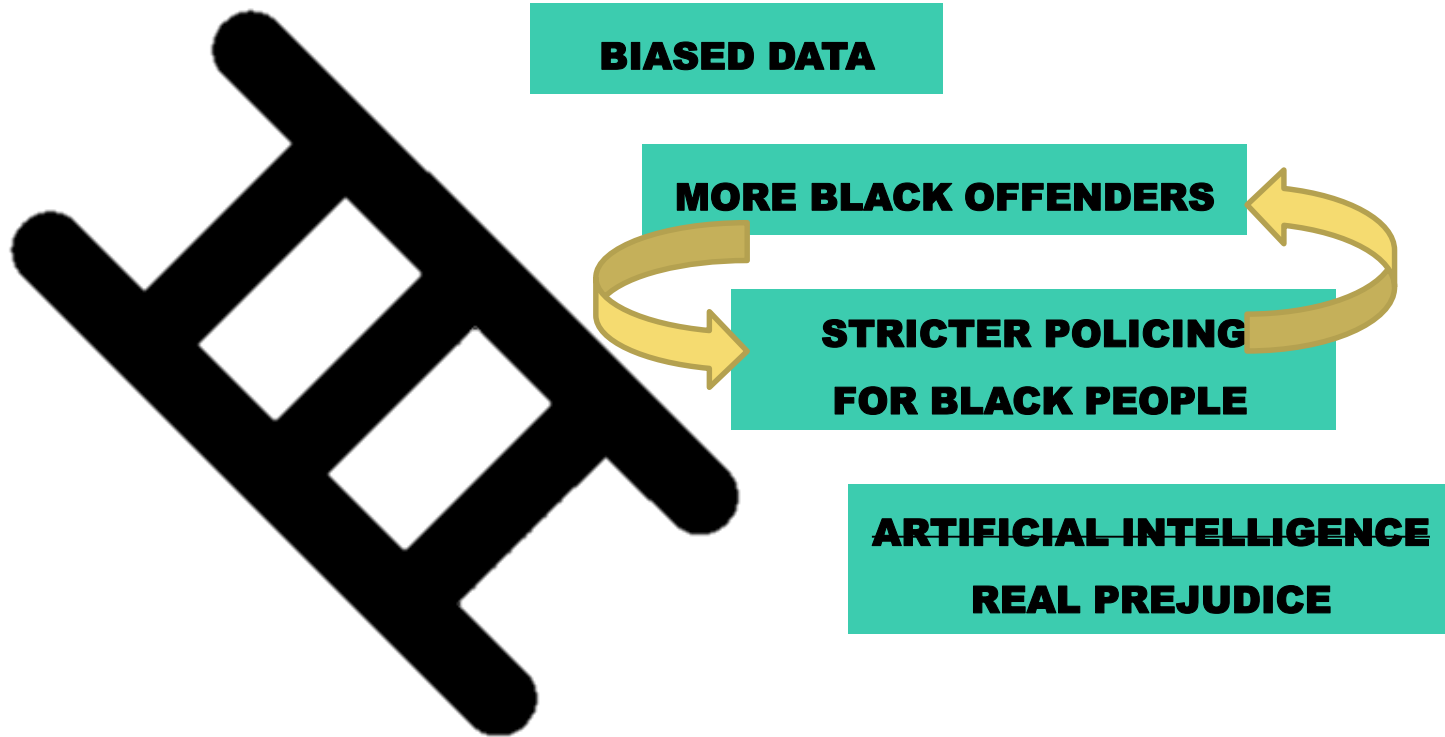
1. Alabama Risk and Needs Assessment
2. Alabama Public Safety Risk Assessment
3. Arizona Risk Assessment Suite
4. Arizona Board Transfer Risk Assessment
5. California Parole Violation Decision Making Instrument
6. California Static Risk Assessment
7. Colorado Actuarial Risk Assessment Scale
8. Connecticut Salient Factor Score
9. Delaware Parole Board Risk Assessment
10. Georgia Board of Pardons and Parole's Field Log of Interaction Data
11. Georgia Parole Behavior Response and Adjustment Guide
12. Georgia Parole Decisions Guidelines Grid System
13. Georgia Department of Corrections Offender Tracking Information System
14. Hawaii Risk and Needs Assessment
15. Illinois Risk Assessment Instrument
16. Illinois Risks, Assets and Needs Assessment Tool
17. Indiana Risk Assessment System
18. Kentucky Pretrial Risk Assessment Instrument

FALSE POSITIVES:

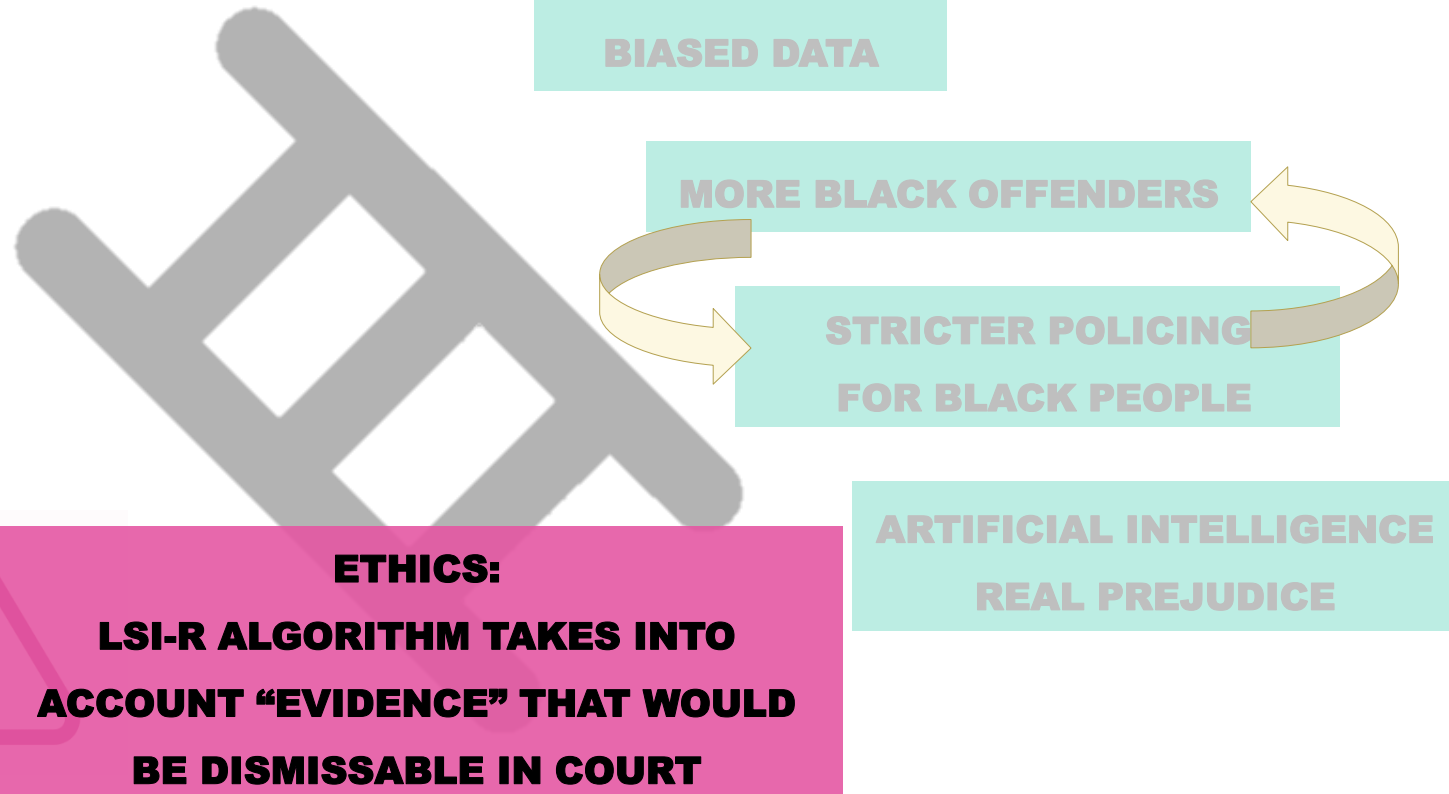
45% BLACK

24% WHITE

RE-OFFENDING



RE-OFFENDING



REJECTING H_0



H_0 : ARTIFICIAL INTELLIGENCE IS UNBIASED

H_1 : ARTIFICIAL INTELLIGENCE IS BIASED

SO WHAT...?



~~CAN WE TAKE THE NEXT STEP? CAN WE NOT RELY
ON AI RESOURCES?~~

~~CAN WE TAKE THE NEXT STEP? CAN WE NOT RELY
ON AI RESOURCES?~~

SO WHAT...?



TRANSPARENCY

ACCOUNTABILITY

RESPONSIBILITY

SO WHAT...?



TRANSPARENCY

ACCOUNTABILITY

RESPONSIBILITY

SO WHAT...?



TRANSPARENCY

ACCOUNTABILITY

“Could the CIA incite revolution in Sudan by pressurising Facebook to promote discontent? Should that be legal? Could Mark Zuckerberg swing an election by promoting Upworthy? Should that be legal?”

Clay Johnson

SO WHAT...?



“Don’t give up”

Safiya Umoja Noble

RESPONSIBILITY

SO WHAT...?



***“Prejudice is a learned trait. You’re not born prejudiced,
you’re taught it.”***

Charles Swindoll



HONEYCOMB.
expect more from data

THANK YOU



Bethan Blakeley
Director

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@HoneycombBethan