Boosting Your Bias Immunity

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Character Reference

You're who? You do what?

Lawful Good	**Neutral Good**	**Chaotic Good**
Lawful Neutral	**True Neutral**	**Chaotic Neutral**
Lawful Evil	**Neutral Evil**	**Chaotic Evil**

Character Reference

You're who? You do what?

Lawful Good	Neutral Good	Chaotic Good
Lawful Neutral	True Neutral	Chaotic Neutral
Lawful Evil	Neutral Evil	Chaotic Evil

Research Polymath

Numerating and Talking

Quantitative Research

Understanding what and how much

Types of Primary Research

Qualitative Research

Understanding what and why

WHAT IS BIAS

WHY WE ARE BIASED

AVOIDING BIASED QUALITATIVE RESEARCH

AVOIDING BIASED QUANTITATIVE RESEARCH

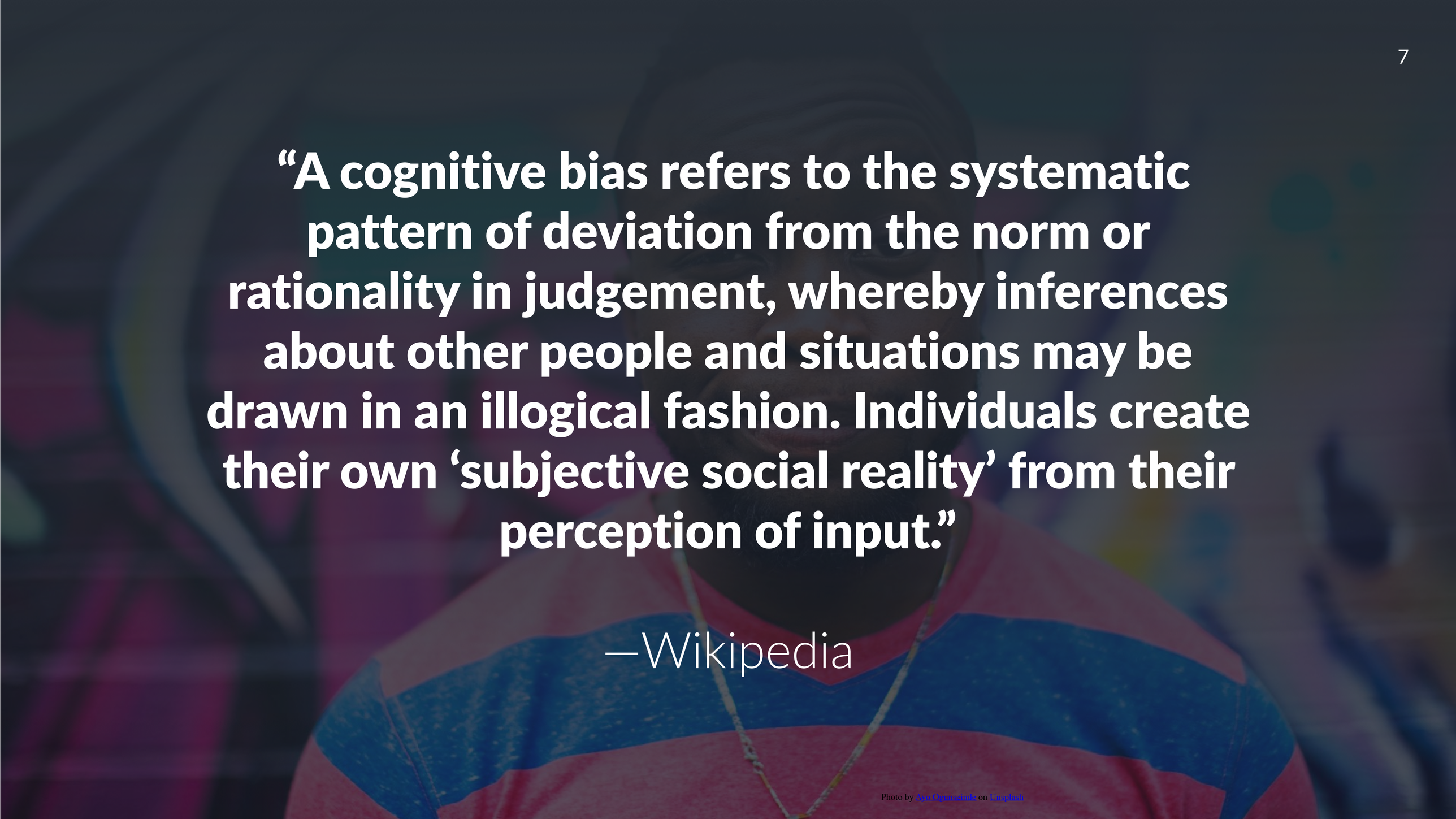
AVOIDING BIASED DECISIONS

What Is Bias?

Seeing is not necessarily believing

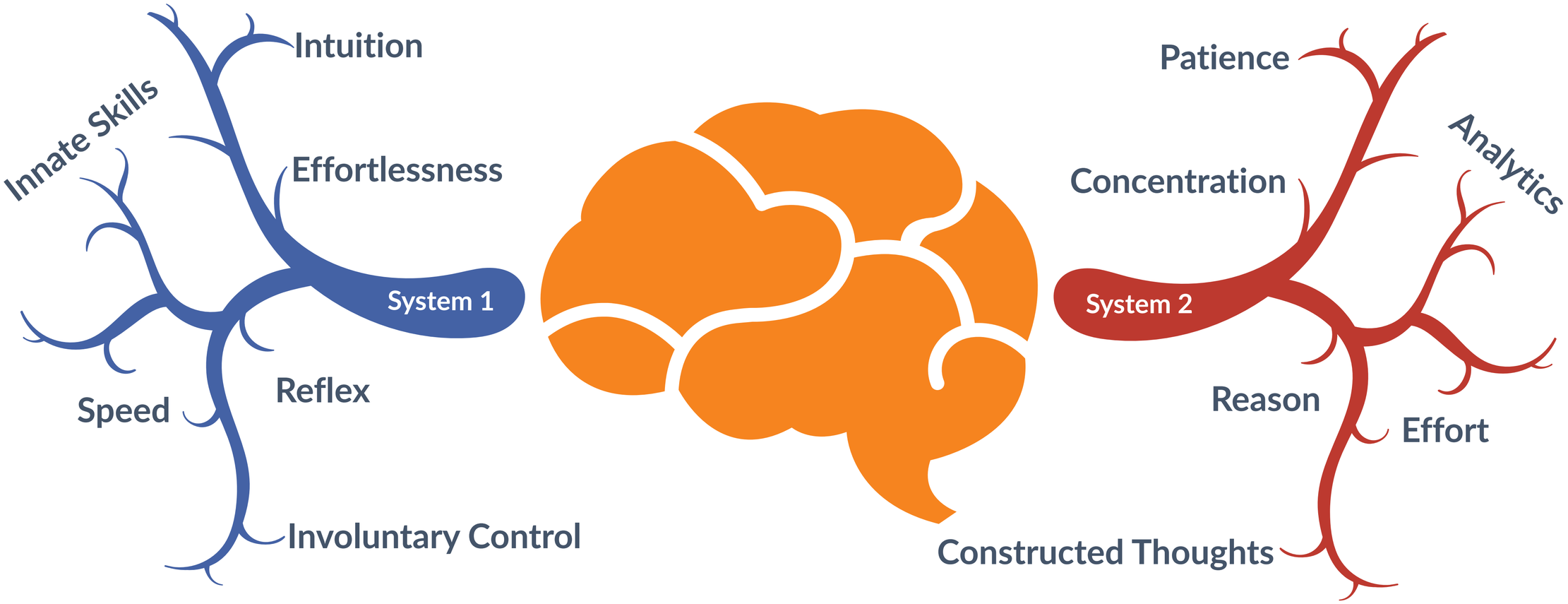
“A cognitive bias refers to the systematic pattern of deviation from the norm or rationality in judgement, whereby inferences about other people and situations may be drawn in an illogical fashion. Individuals create their own ‘subjective social reality’ from their perception of input.”

—Wikipedia



Thinking Fast and Slow

The foundation of behavioural economics



Move Fast and Break Things!

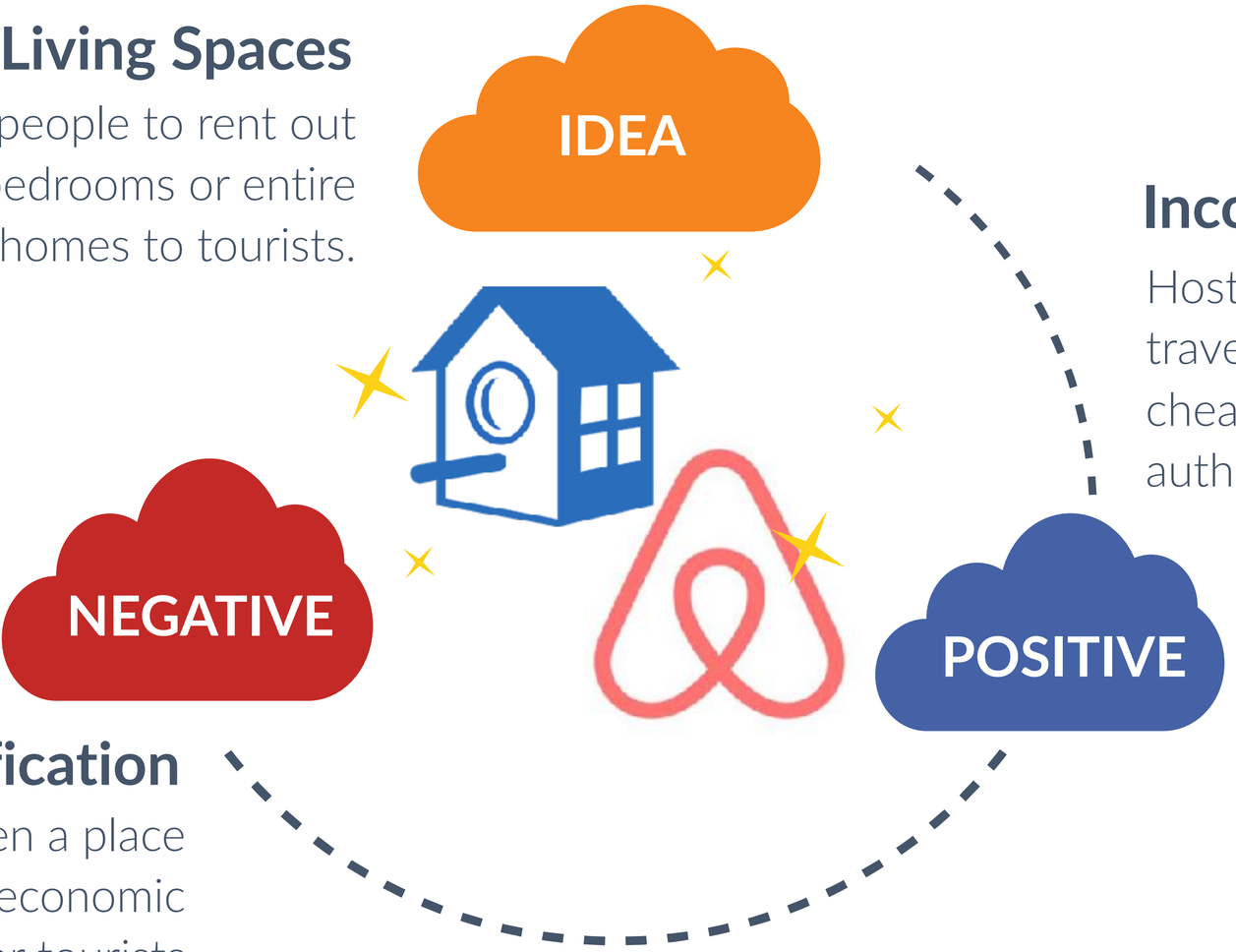
And Fix Them Only If It’s In Our Financial Best Interest

Disrupting Hotels

When is a house not a home?

Sharing Living Spaces

Allow people to rent out spare bedrooms or entire homes to tourists.



Income & Ease of Travel

Hosts make extra money and travellers can stay somewhere cheaper and often more authentic than a hotel. Win Win.

Mass Gentrification

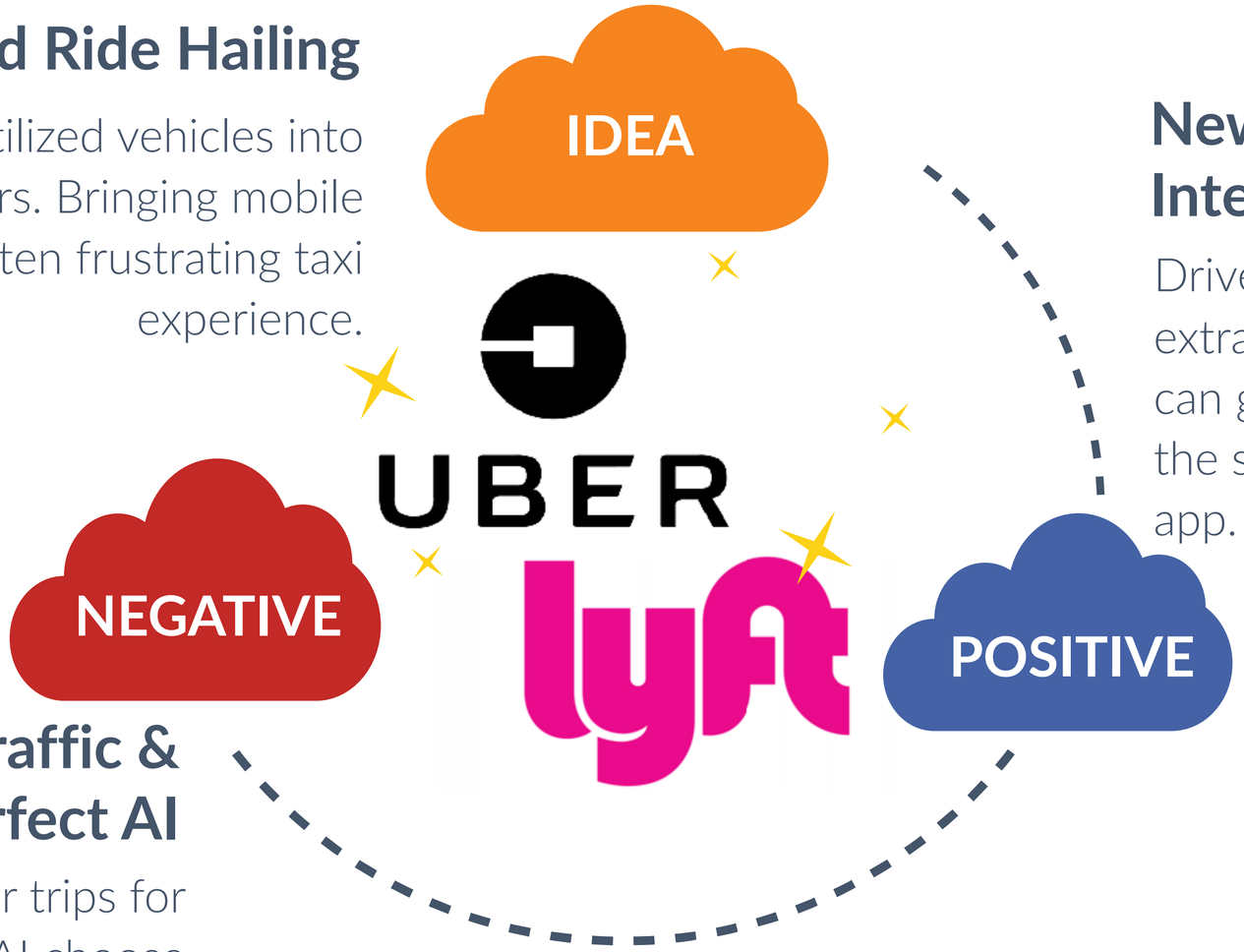
What happens when a place to live has more economic value as a place for tourists to stay?

Disrupting Urban Transit

When taxis compete with mass transit, who wins?

On-Demand Ride Hailing

Turning under-utilized vehicles into income generators. Bringing mobile tech to the often frustrating taxi experience.



New Income & Ease of Intercity Movement

Drivers have a new source of extra or primary income. Riders can get from place to place with the simplicity of a well designed app.

Increased Traffic & Imperfect AI

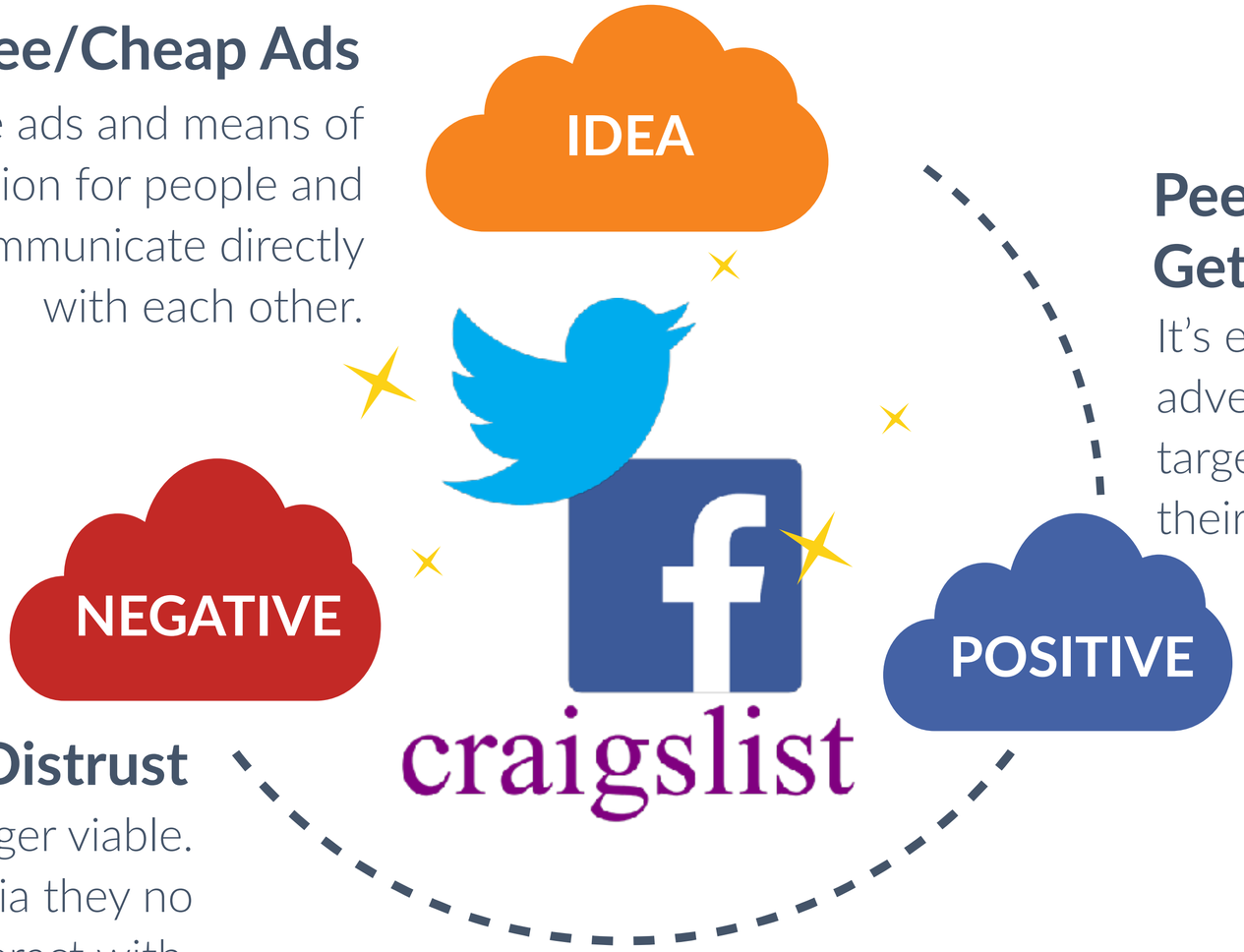
More single person car trips for higher traffic and letting AI choose between killing pedestrians or riders

Disrupting Newspaper Ads

No local ads means no local journalism

Offer Free/Cheap Ads

Offer online ads and means of communication for people and businesses to communicate directly with each other.



Peer2Peer & SMB Ads Get Direct

It's easier for individuals to advertise to others. SMBs can target and communicate with their customers directly.

Media Atrophy & Distrust

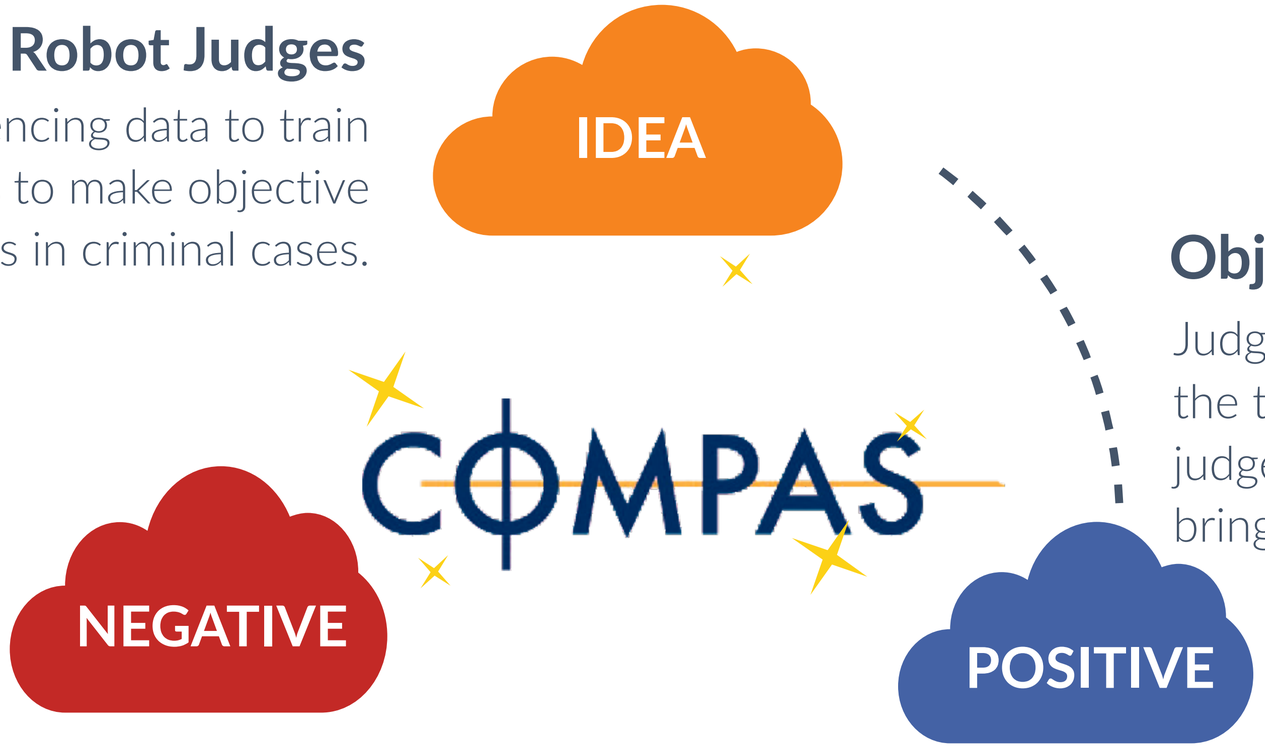
Local journalism is no longer viable. The public distrusts a media they no longer interact with.

Disrupting Justice

Do robots get hangry?

Objective Robot Judges

Use prior sentencing data to train computers to make objective judgements in criminal cases.



Objective Consistency

Judgements don't fluctuate with the time of day or whether the judge just ate. Machines don't bring emotion into decisions.

Uneven Fairness Baseline

The system is defined as fair, but the definition of what is fair differs. We see the system the algorithm is based off as fair, but what if it's not?

Why Are We Biased

To protect and serve

Primary Sources of Bias

Efficiency and Defence

Self Protection

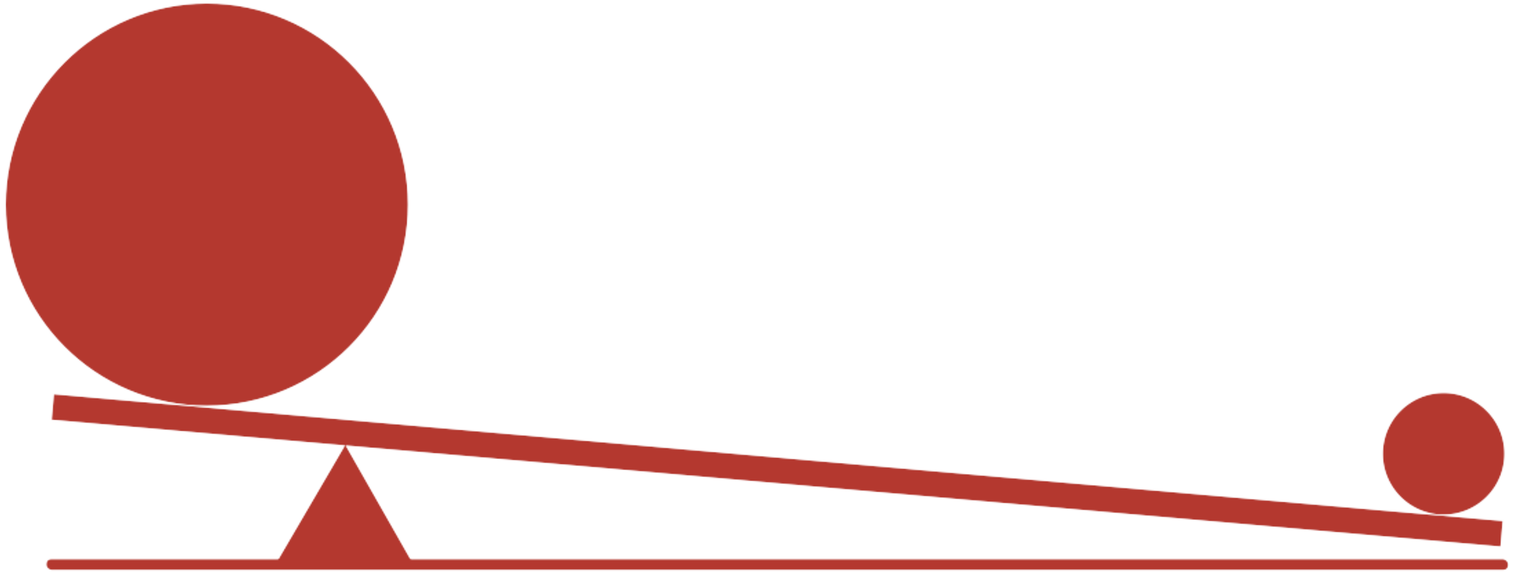
Avoid bodily and ego harm

Efficient Decision Making

System 1

Bias is like polluted air

- Impossible to avoid, but filterable.
- Filtering requires identification of potential influencing biases.



How researchers leverage bias

Sometimes bias serves a purpose. For researchers, it can maximize the ratio of insights to data.

- We can't collect and analyze all data from everywhere.
- We intentionally bias our methodology, our sample selection, and the analysis to get most insight value from our research.

Types of Bias

Name Thy Enemies

The World of Biases

Using bias to understand bias

There are over 170 types of cognitive biases

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Using bias to understand bias

There are over 170 types of cognitive biases

ABUNDANT INFORMATION

Selective filtering

We can't take it all in

LIMITED CONTEXT

We can't know everything, so we fill in the gaps

LIMITED TIME

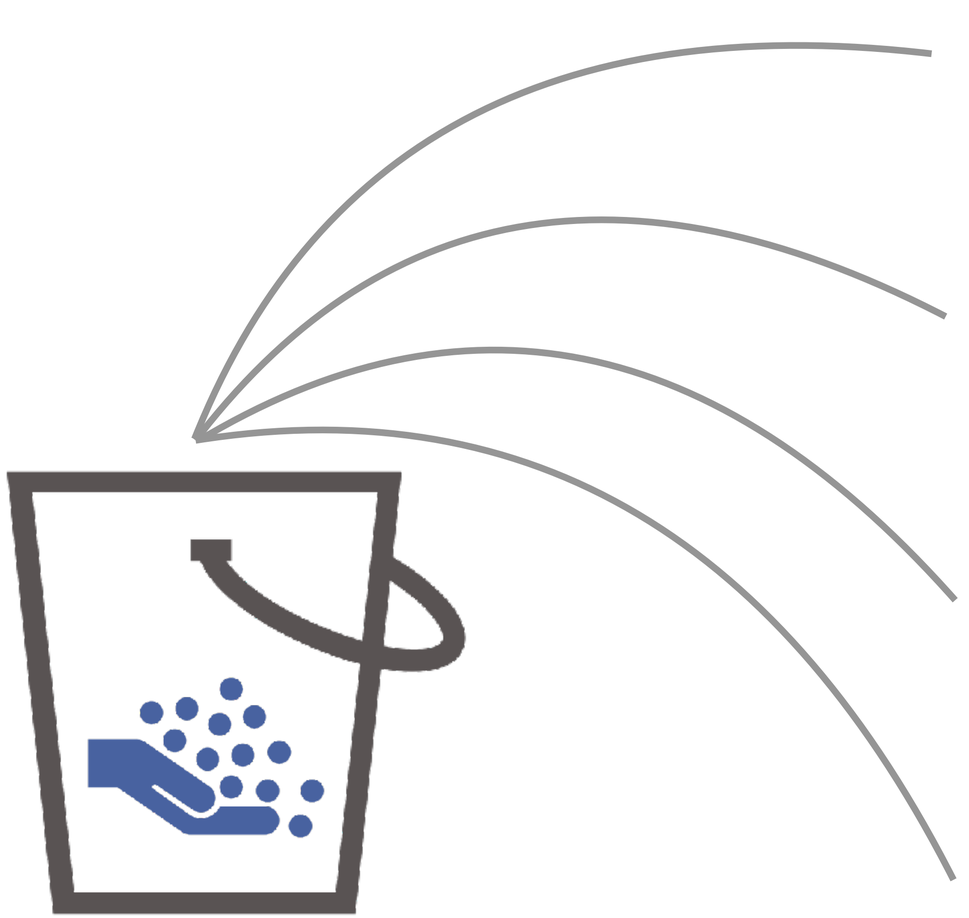
We need to act fast

LIMITED MEMORY

We can't remember everything, so what sticks?

Abundant Information

Selective filtering, we can't take it all in



AVAILABILITY HEURISTIC

We notice what is already primed in our brains from repeated past experience

ANCHORING

The order receive information influences our judgement

CONFIRMATION BIAS

We tend to notice and agree with information that fits what we already believe

BIZARRENESS EFFECT

We tend to have better memory for things that are odd than we do things that are common

Limited Context

We can't know everything, so we fill in the gaps

FRAMING EFFECT

We judge items and subjects by how they are presented

PLACEBO EFFECT

Believing something works can be just as powerful as something that actually works

FUNDAMENTAL ATTRIBUTION ERROR

We judge others by what we see in the moment, but we judge ourselves based on the situation

IN-GROUP BIAS

We favour people who belong to the same group as ourselves

Limited Time

We need to act fast

OPTIMISM BIAS

We overestimate the probability of a positive outcome

BARNUM EFFECT

We connect things leaps through leaps of imagination because we don't have all the facts

DUNNING-KRUGER

When you're not an expert, there is a tendency to think layperson's knowledge is all there is

GROUPTHINK/BANDWAGON EFFECT

Opinions are based on fitting in with the group rather than evidence.

Limited Memory

We can't remember everything, so what sticks

NEGATIVITY BIAS

Negative events and feelings stay with us longer than positive ones

SPACING EFFECT

We learn better in bits and chunks over time rather than all at once

IMPLICIT STEREOTYPE

Learned associations between various qualities and social categories

PEAK-END RULE

People judge an experience based in how they felt at its most intense point rather than overall

Avoiding Biased Qualitative Research

That's interesting. Tell me more about that.

Confirmation Bias

- Don’t test your own designs.
- Involve outsiders in the discussion guide approval process.
- Hire research agency or contractor for the project.

Research Bias

- Try to begin every questions with Who, What, When, Where, Why, and How
- Avoid Should, Would, Is, Are and Do You Think, unless you plan to have a follow up.
- Let the silence sit there.

Anchoring Heuristic

- Randomize the order of test stimuli
- Don’t offer multiple choice questions
- Don’t set baselines within questions.

Availability Heuristic

- Debrief. Debrief. Debrief. Make sure stakeholders are seeing the same things you are.
- Get transcripts of your interviews and analyze them thoroughly.

Interpretive Bias

- Restate ambiguous answers in your own words, but make sure the participant knows they have permission to contradict you.
- Don’t let ignorance got in the way of understanding. Ask for clarification.

Photo by Caleb Woods on Unsplash

Be Self Critical, But Not Self Flagellating

We’re all in a constant state of learning and improvement

Avoiding Biased Quantitative Research

Random probability sampling

Acquiescence Bias

- Avoid questions that ask respondents whether or not they disagree with you.
  - Yes/No
  - Agree/Disagree
  - True/False

Desirability Bias

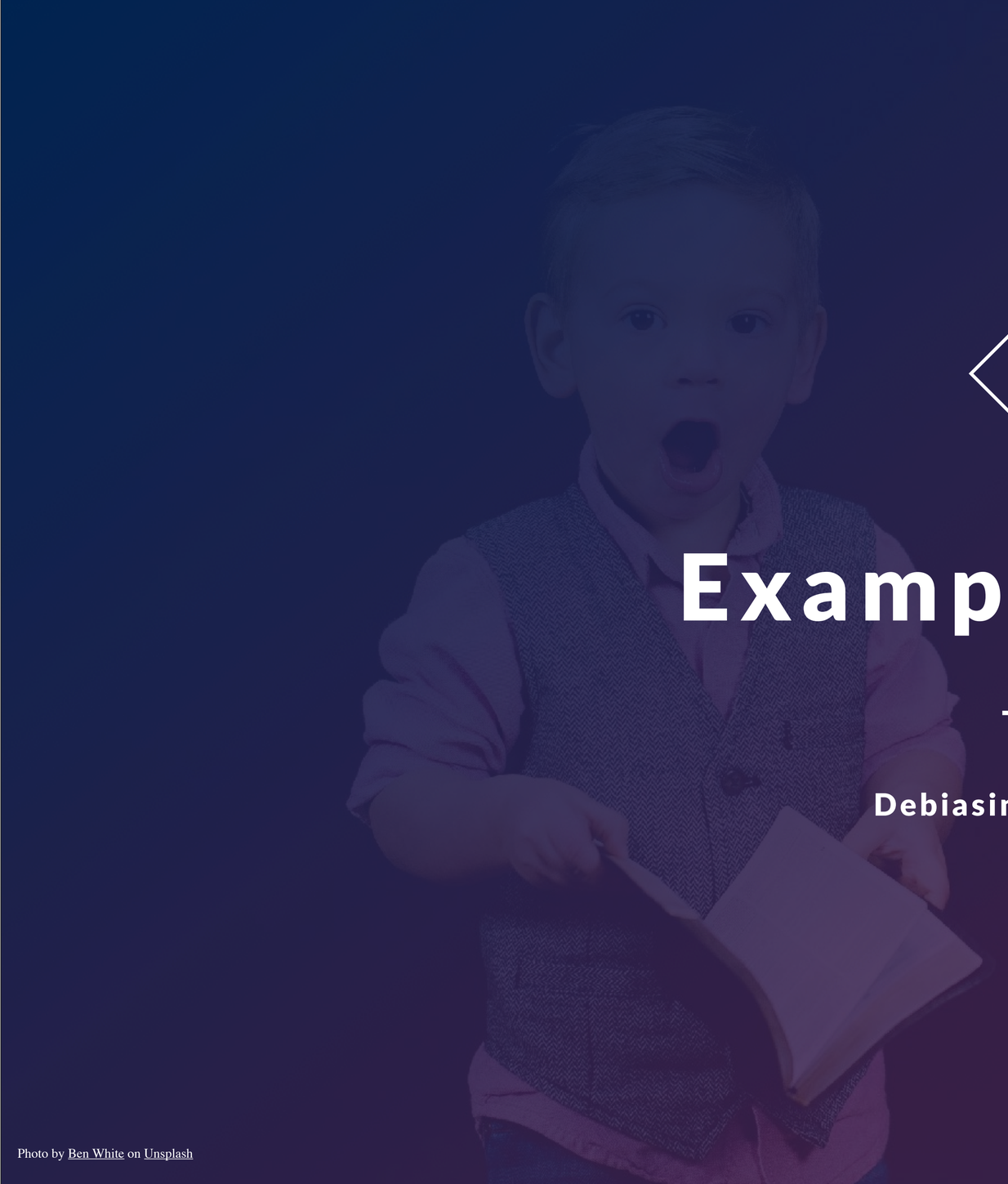
- Don’t ask people to report on their own consumption or behaviour in retrospect.
  - Get the by monitoring data in the moment or from a neutral third party

Sample Bias

- Use a sample size calculator to know how many respondents you need for statistical significance.
- Give up some control of how the respondents for your sample are selected.
  - Random number generators
  - Dice
- Use quotas to make the sample reflect the population.

Research Bias

- Word questions carefully.
  - Avoid leading, framing, and telegraphing
- Use red herring questions to increase your data quality.



Example Time!

Debiasing a Question

Photo by Ben White on Unsplash

Debiasing a Question

What is your opinion on the following statement:

Jean Luc Picard was (will be) the best captain in Starfleet.

- ○ Strongly agree
- ○ Agree
- ○ Neither agree nor disagree
- ○ Disagree
- ○ Strongly disagree

Debiasing a Question

What is your opinion on the following statement:

Jean Luc Picard was (will be) the best captain in Starfleet.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Debiasing a Question

Who was (will be) the best captain in Starfleet?

- James T. Kirk
- John Archer
- Benjamin Sisko
- Kathryn Janeway
- Jean Luc Picard

Debiasing a Question

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Randomize

Debiasing a Question

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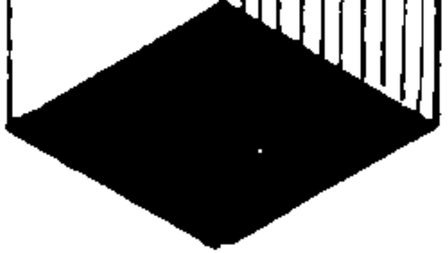
TEST YOUR SURVEYS

A survey is a designed interface, make sure it works



Avoiding Biased Decisions

Move at a steady pace and make good choices

Photo by Vidar Nordli-Mathisen on Unsplash

REMEMBER

Bias is unavoidable, but it is manageable

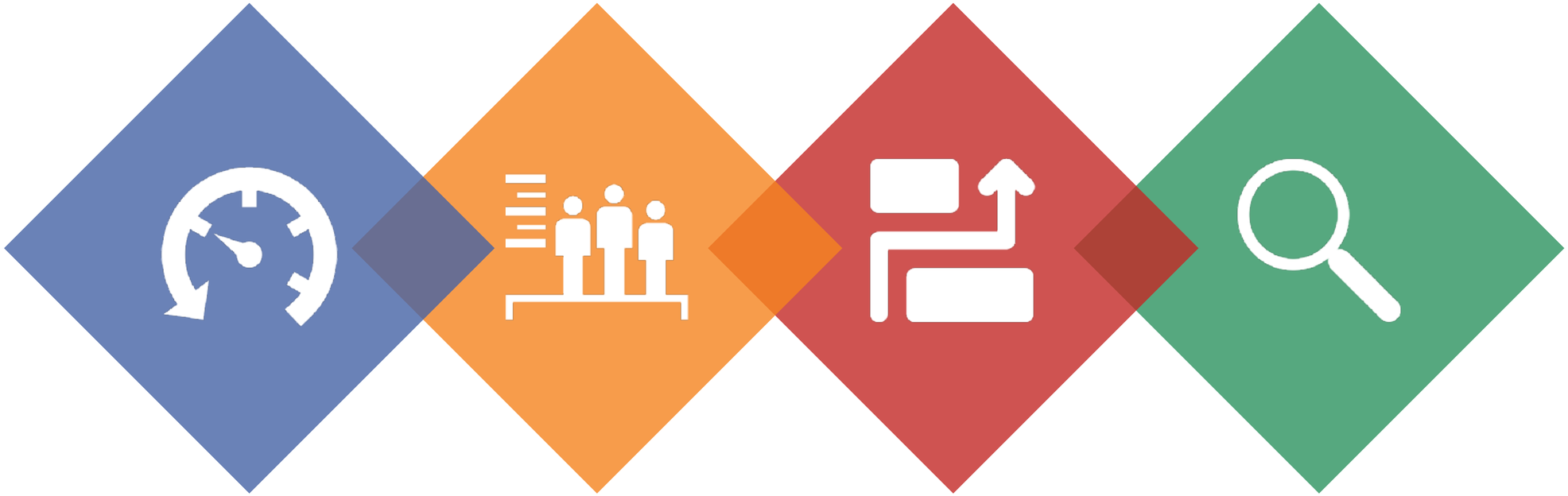
Think Like a Researcher

Disprove your hypothesis

Photo by João Silas on Unsplash

Process Matters

I love it when a plan comes together



Slow Down

Bias Identification

Bias Avoidance

Reevaluation

Biases Are Avoided on Purpose, Not By Accident

Take Good Notes

It works for Comey, it will work for you

- Write it down or it never happened
- Get agreement on goals
- What is the understanding of risk?
- Revisit after the decision is in action

Don’t Try to Control Everything

How do you reduce individual or group influence?

Secret Ballots

Individual Opinions

Reverse Brainstorming

Outside Input

Uncomfortable Questions

No HiPPOs

> If we are all in agreement on the decision - then I propose we postpone further discussion of this matter until our next meeting to give ourselves time to develop disagreement and perhaps gain some understanding of what the decision is all about.

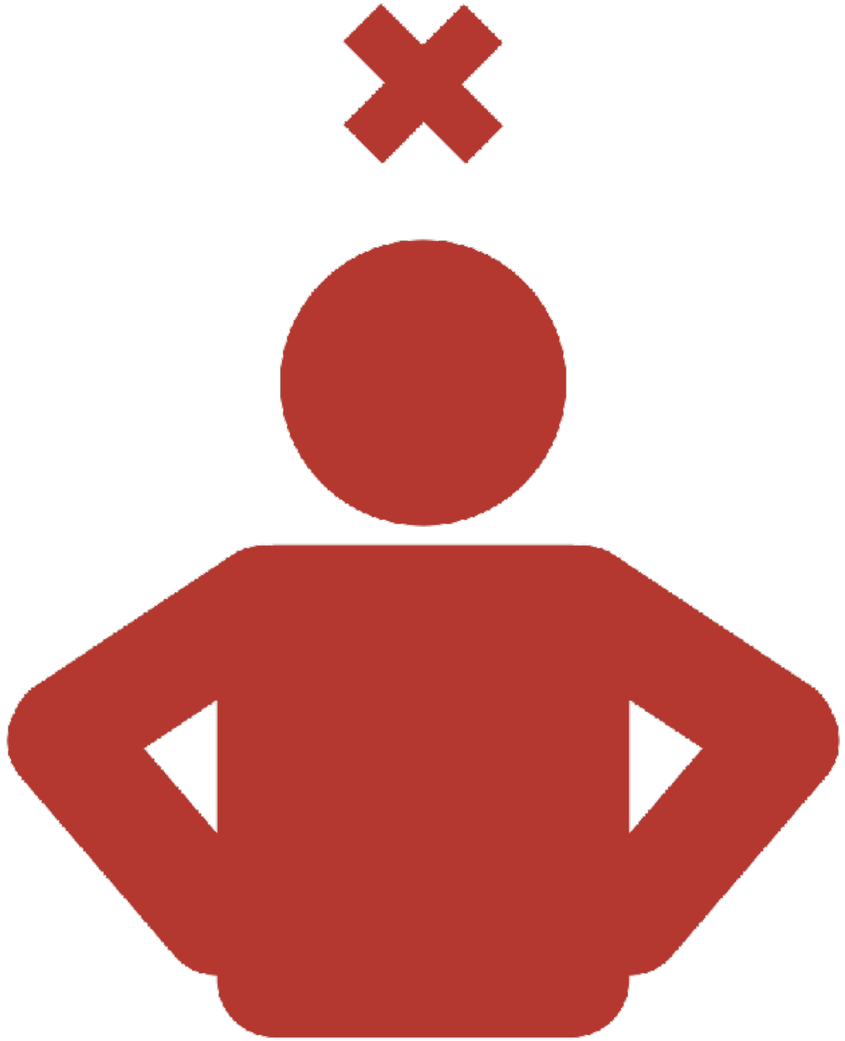
ALFRED P. SLOAN

CEO of GM

Hypotheses were made to be disproved

- Researchers don’t try to prove their theories. They try to disprove them.

- If an idea can withstand counter evidence, it’s probably a good idea.

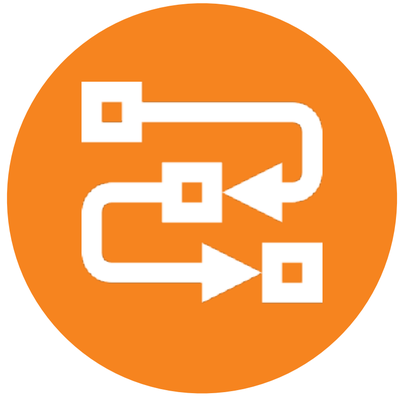


Think Like a Researcher

Yes, take a photo of this slide

What are the biases at play?

Abundant Information
Limited Context
Limited Time
Limited Memory



Have a process

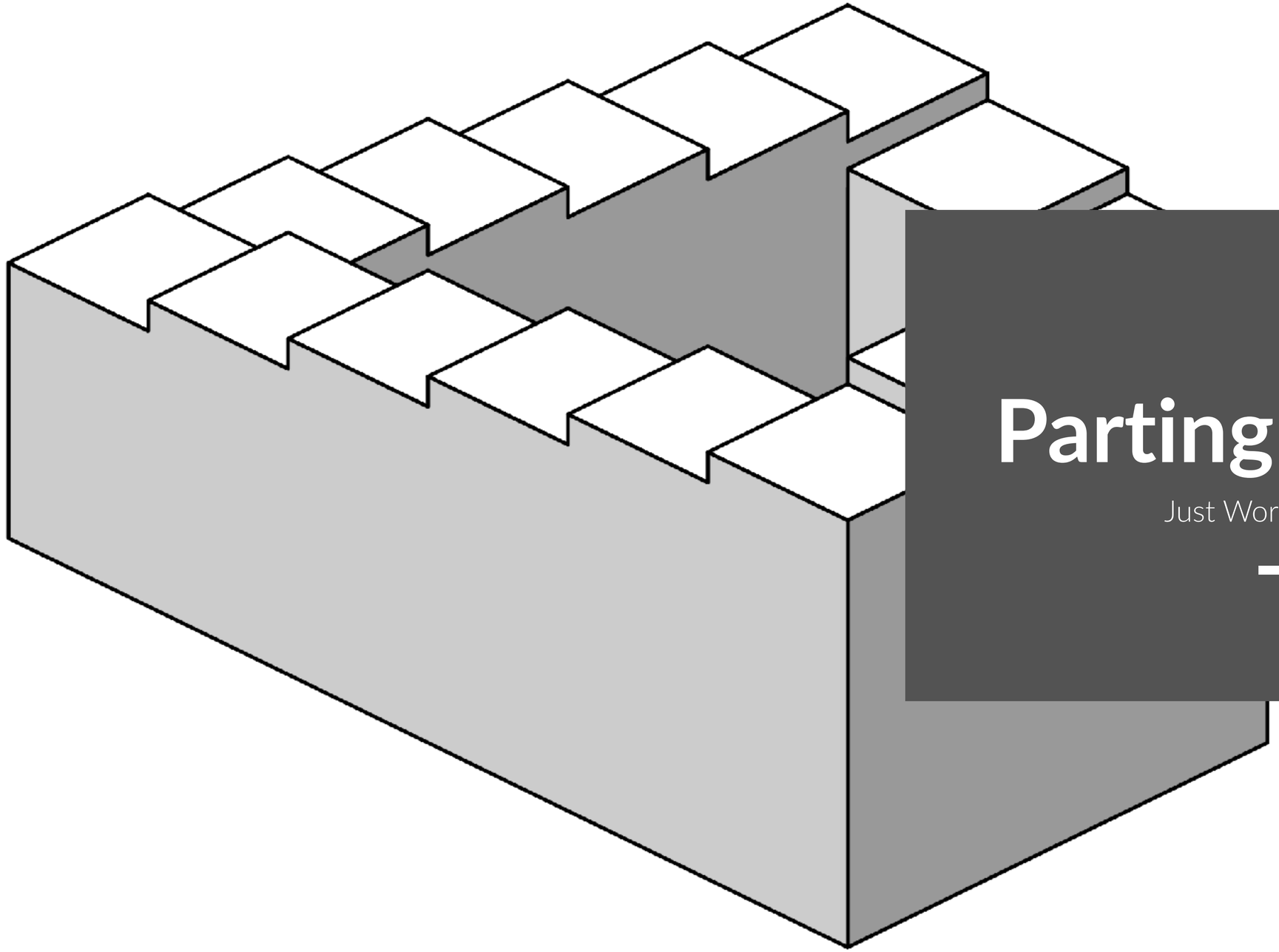
Slow your roll
Identify potential biases
Avoid biases
Revaluate

Take good notes

Record consensuses
Revisit after implementation

Be open to disagreement

Break echo chambers
Strong ideas withstand contrary arguments



Parting Thought

Just World Hypothesis

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THANK YOU

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1% FOR THE PLANET — MEMBER —