



In God We trust, all others , use data

by carlos souza

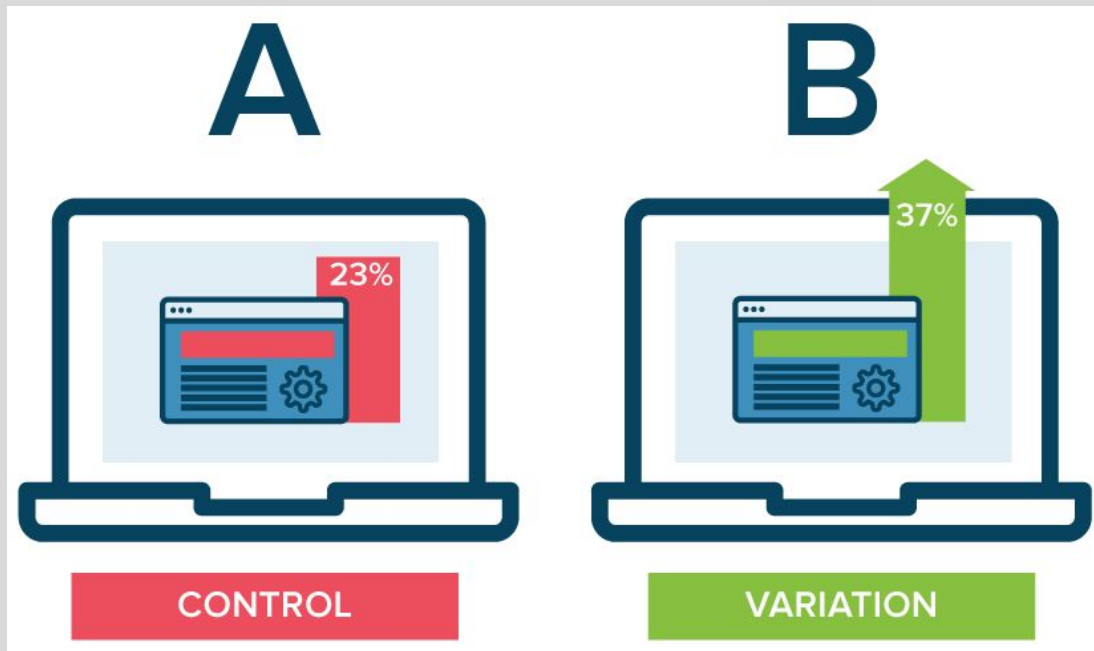
Aubay Portugal

A/B Tests



Definition

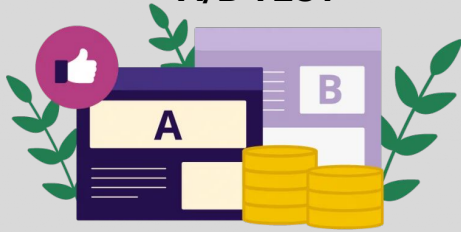
“A WAY TO TEST YOUR PAGE AGAINST THE CURRENT DESIGN AND DETERMINE WHICH ONES PRODUCES POSITIVE RESULTS.”



- Prevents regression
- New feature always better
- Never worse

Types

A/B TEST

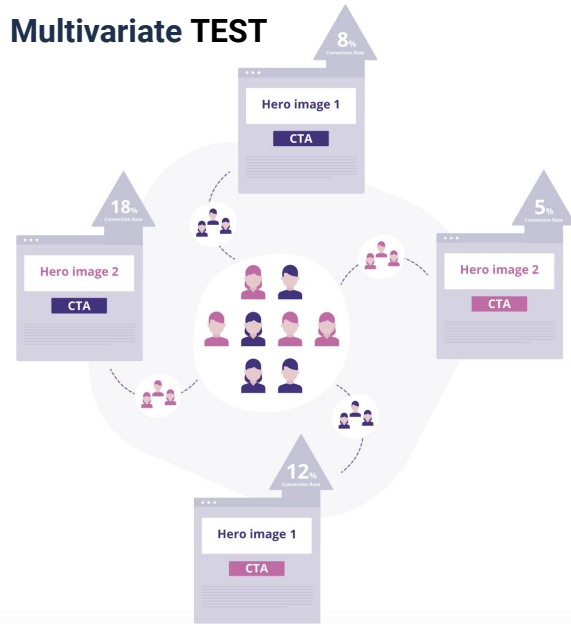


Multipage TEST



aubay

Multivariate TEST



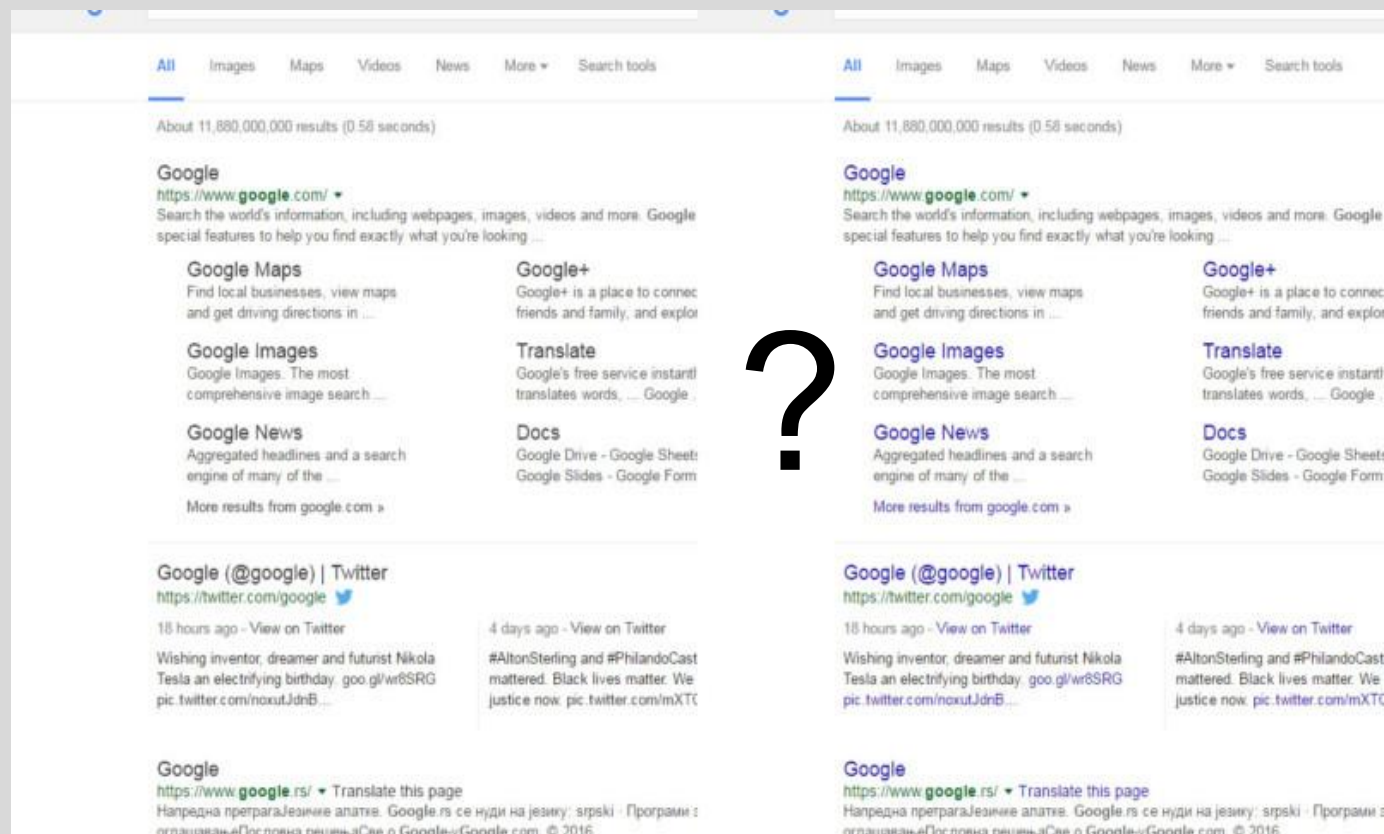
Split URL TEST



The Beginning

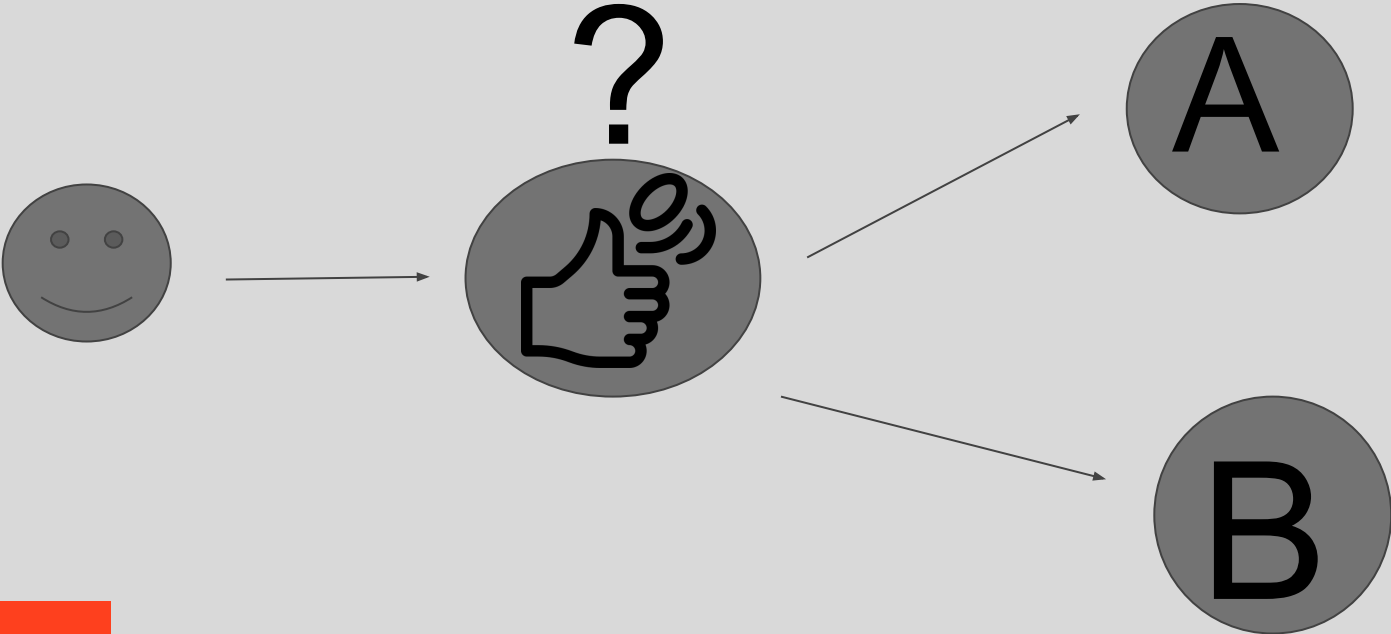


Make what the user want



- Best color result
- Best Number of results

How it works





OBAMA'08

GET INVOLVED



Media

JOIN THE MOVEMENT

SIGN UP











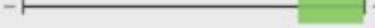



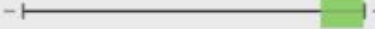


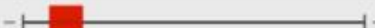

Button

PAID FOR BY OBAMA FOR AMERICA



CONTINUE to WEBSITE

Obama case

Combinations (24)		Page Sections (2)		Download:  XML  CSV  TSV  Print		
Relevance Rating 	Variation	Est. conv. rate 	Chance to Beat Orig. 	Observed Improvement 	Conv./Visitors 	
Button <div><div>5 / 5</div><div><div></div><div></div><div></div><div></div><div></div></div></div>	Original	7.51% ± 0.2% 	—	—	5851 / 77858	
	Learn More	8.91% ± 0.2% 	100%	18.6%	6927 / 77729	
	Join Us Now	7.62% ± 0.2% 	73.5%	1.37%	5915 / 77644	
	Sign Up Now	7.34% ± 0.2% 	13.7%	-2.38%	5660 / 77151	
Media <div><div>5 / 5</div><div><div></div><div></div><div></div><div></div><div></div></div></div>	Original	8.54% ± 0.2% 	—	—	4425 / 51794	
	Family Image	9.66% ± 0.2% 	100%	13.1%	4996 / 51696	
	Change Image	8.87% ± 0.2% 	92.2%	3.85%	4595 / 51790	
	Barack's Video	7.76% ± 0.2% 	0.04%	-9.14%	3992 / 51427	
	Sam's Video	6.29% ± 0.2% 	0.00%	-26.4%	3261 / 51864	
	Springfield Video	5.95% ± 0.2% 	0.00%	-30.3%	3084 / 51811	





OBAMA'08

CHANGE

WE CAN BELIEVE IN



JOIN THE
MOVEMENT

LEARN MORE

PAID FOR BY OBAMA FOR AMERICA



CONTINUE to WEBSITE

Why do we A/B Test? HIPPO* Defense



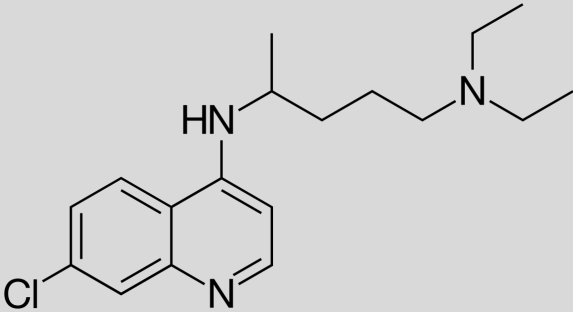
"If we have data,
let's look at data.
If all we have are opinions,
let's go with mine."

– Jim Barksdale,
Netscape CEO

★ Highest Income Person's Opinion

~~I THINK~~

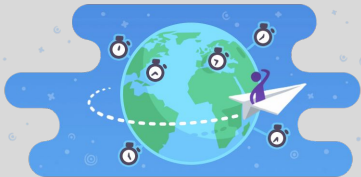
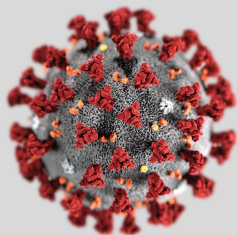
I KNOW



STANDARD FDA DRUG TEST

TEST CASUAL RELATIONSHIP

INSULATE EXTERNAL FACTORS



CORRELATION x CAUSALITY

EXAMPLE 1

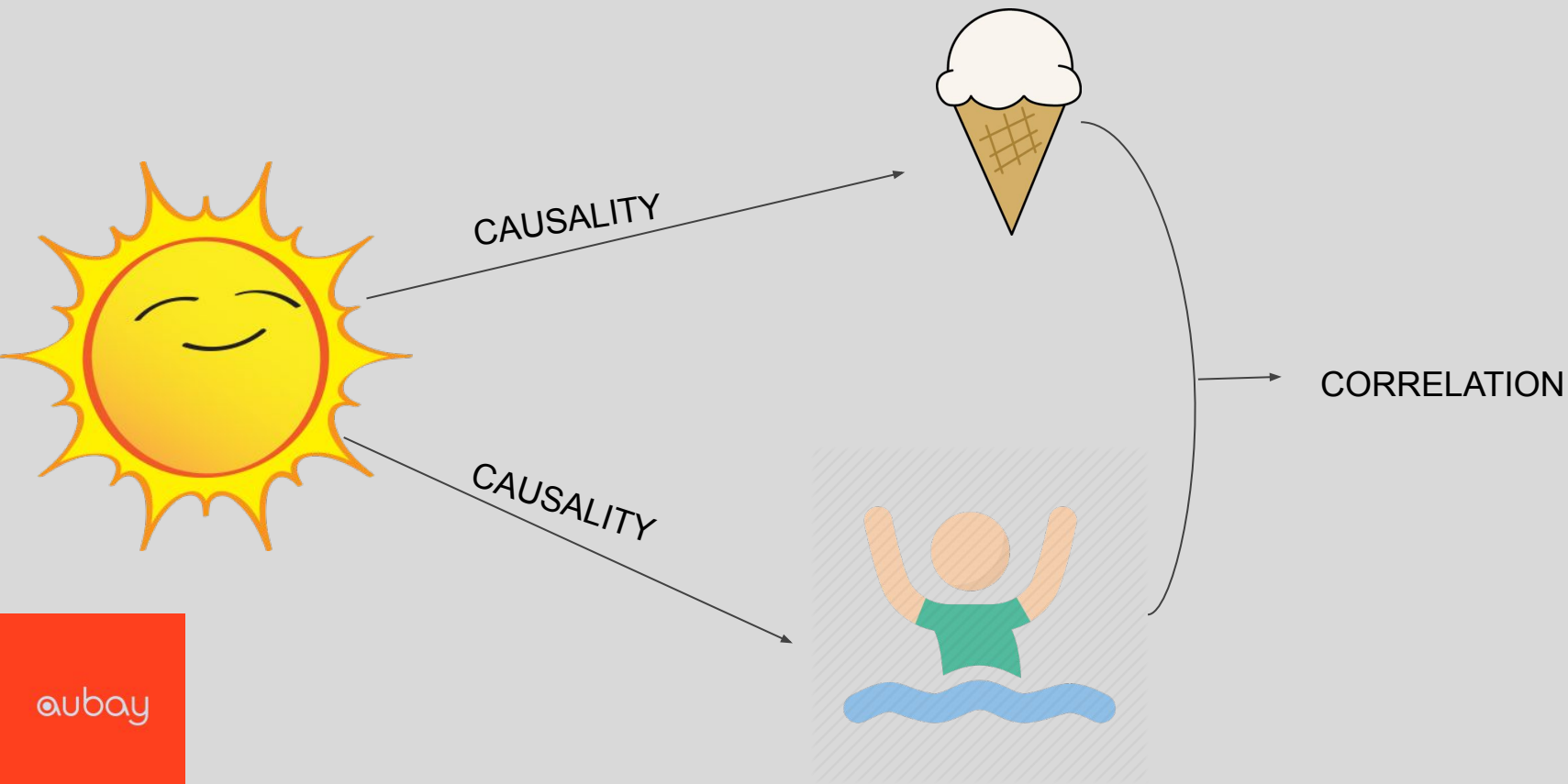


AS ICE CREAM SALES INCREASE, THE RATE OF DROWNING DEATHS INCREASES SHARPLY.

THEREFORE, ICE CREAM CONSUMPTION CAUSES DROWNING.

CORRELATION x CAUSALITY

EXAMPLE 1 THEREFORE, ICE CREAM CONSUMPTION CAUSES DROWNING?



THE POINT AT WHICH A USER TAKES THE DESIRED ACTION

FOR E-COMMERCE

- * COMPLETED PURCHASES
- * PRODUCT PAGE VIEW

FOR MEDIA

- * PAGE VIEW
- * ARTICLES READ

FOR DONATION

- * FORM COMPLETION

YOU ARE THE HIPPO





Find a new home or apartment

☒ Existing Homes from REALTOR.com®

☐ New Homes from Move.com™

☐ Foreclosures from RealtyTrac.com™

☐ Rentals from Move.com™

Price Range: \$0 — No Maximum

Enter City Select a State

Or Enter ZIP

• Senior Living • Home Plans

Control

Existing Homes Foreclosures New Construction Rentals

Find Existing Homes for Sale



or

Treatment1

Existing Homes Foreclosures New Construction Rentals

Find Existing Homes for Sale



or

Treatment 2

What are you looking for?

☒ Existing Homes

☐ New Construction

☐ Rentals

☐ Foreclosures

☐ Senior Living

☐ Home Valuation

☐ Professional Services

to

☒ Condos/Townhouse ☒ Single Family Home

Treatment 3

Find a new Home or Apartment

 Existing Homes

 New Construction

 Foreclosures

 Rentals

Enter Zip or Enter City State

Find Your Dream Home or Apartment

☒ Existing homes

☐ New construction

☐ Foreclosures

☐ Rentals

Treatment 5

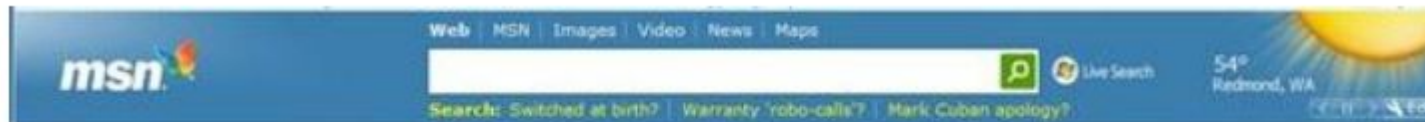


Figure 6 Control for Search branding experiment

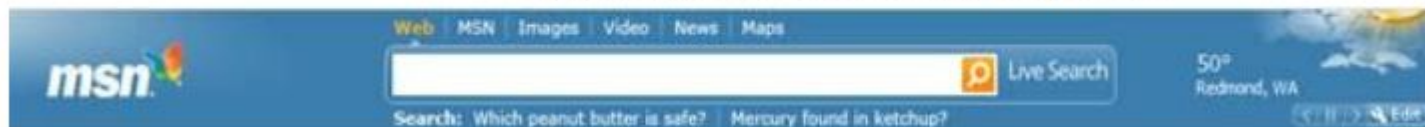


Figure 7 Treatment for Search branding experiment

Neutral Result

How to keep the upper hand in your business relationships.

The one who remembers always has an edge. Whether you're considering a dispute or reaching out to clients, it pays to be prepared.

Here's how to get that edge by using Highrise

- **Inquire with preparation.** Highrise keeps a log of notes so you can recall details from past conversations. Have the whole back story when you walk into a meeting. Highrise is like an always available cheat-sheet.
- **Track promises from vendors, partners and clients** before a problem even occurs. When disputes happen, you'll be ahead of the game with a dated record of the whole issue.
- **Never forget to follow-up.** Instead of getting to your agenda, let Highrise tell you to follow up. Highrise will send you a text message or email so you never forget to make the call.

Always know where to find everything. Keep filing cabinets with papers and folders. Highrise lets you attach notes and documents right on a page for the person they are about. You'll have one place to find the info you need.

Sleep well at night. Life is easier when you have a system remembering things for you. Information goes into Highrise so you can get it out of your mind and off your shoulders.

Declutter your email inbox. Forward emails to Highrise and they will be automatically filed under the correct contact for easy reference.

Share with your team. It's embarrassing when your right hand doesn't know what the left is doing. Highrise gives your team one place to see the latest status. Find out who talked to a person last, what they said, and who is

On the page

- How to set an office note
- Share
- See more information about our features
- What our customers say
- About Us, Contact, Careers, and More
- Subscribe to our newsletter

Highrise gives you one place to store all your business information and also share important information.

Home

How Highrise?

Contact & Sales

iPhone

Help/Support

Plans & Pricing

Sign In

Signals

Know Your Contacts & Leads by Heart

Over 100,000 businesses use Highrise to manage 20 million contacts & customer relationships.

Who followed up on that new client sales lead?

What's the lawyer's mobile number? When did we last speak with her?

Where are the notes from Monday's conference call?

Highrise

See Plans and Pricing

Highrise remembers so you never forget.

Store every conversation, email, call, meeting, document, and deal you've ever had with a contact. With Highrise you'll always know who you talked to, what was said, and when to follow-up next.

Import/Import contacts from Outlook, Excel, iCard, etc.

Export CRM information so you never forget to follow up

See whether your inbox, forward or text directly in Highrise

Highrise is the perfect fit

Highrise is simple to use

Michael McDonald

Director of Sales

Highrise was a game-changer for our sales team.

Michelle Kenna

Executive Director

Highrise was a game-changer for our sales team.

Angie Parkins

Executive Director

Highrise was a game-changer for our sales team.

Colleen Spurr

Executive Director

Highrise was a game-changer for our sales team.

Meet some more Highrise customers

Highrise's focus on simplicity, clarity, and ease of use make it truly unique. You'll love using Highrise.

Jordan Chang

Founder, Third Investment

Highrise was a game-changer for our sales team.

Stephanie Lake

Log

Highrise was a game-changer for our sales team.

ORIGINAL DESIGN

Highrise

From CRM to Productivity

"Keeping track of our business contacts was a pain when we all shared a single spreadsheet. Highrise is much better."

— Jordan, Project Manager at One Design

Have and organize notes and email conversations for up to 30,000 customers and contacts.

Keep track of proposals and deals. Share status with your company, department, or team.

Never forget to follow-up. Get a text message or email so you never forget to make the call.

Start using Highrise today

With free 30-day trial. Cancel anytime.

Highrise

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Log

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aubay



Over 170,000 businesses depend on Highrise to manage 20 million contacts & customer relationships.



"Highrise is the perfect fit for my law office." I generated way too much stuff. Papers and files inside piles and piles of boxes. Highrise helped me get my office in order. Highrise saves me space, money, and time. It's a great product and it works.
— Mayra, Attorney at Law



"We pick up on conversations where we left off." It was easy at the beginning to keep track of things on paper, but it soon got more difficult to keep everything in order. Now we keep track of 11,000 contacts in Highrise. We love Highrise.
— Jill, Owner of a translation firm



"We use Highrise for 100% of what we do." We were using a combination of address books and email. Now we hardly use email to keep track of things. I can see what all my employees are working on. We can't live without Highrise.
— Jack, CEO of a software company

TEN ways Highrise helps your business.

- ✓ Review a colleague's notes before calling her contact or the printer
- ✓ Get updates on deals and leads your salespeople are working on
- ✓ See all the follow-ups scheduled for today and this week
- ✓ Build a list of all the designers your company has hired in the past
- ✓ Set a reminder to write your client a thank-you note next Friday
- ✓ Review past emails and notes while on a call with a client
- ✓ Keep all important emails from a customer together on one page
- ✓ See all the people your company knows in the local press
- ✓ Schedule a follow-up sales call with a lead or client in 30 days
- ✓ Keep track of problems you're having with vendors and suppliers

Try Highrise today for FREE, no strings attached.

Start using Highrise today

Risk-free 30-day trial. No contracts. No pay-when-late. Cancel anytime.

HIGHRISE (basecamp)

<https://signalnoise.com/posts/2991-behind-the-scenes-ab-testing-part-3-final>



JOCELYN



MICHAEL



WILL



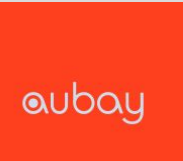
JOHN

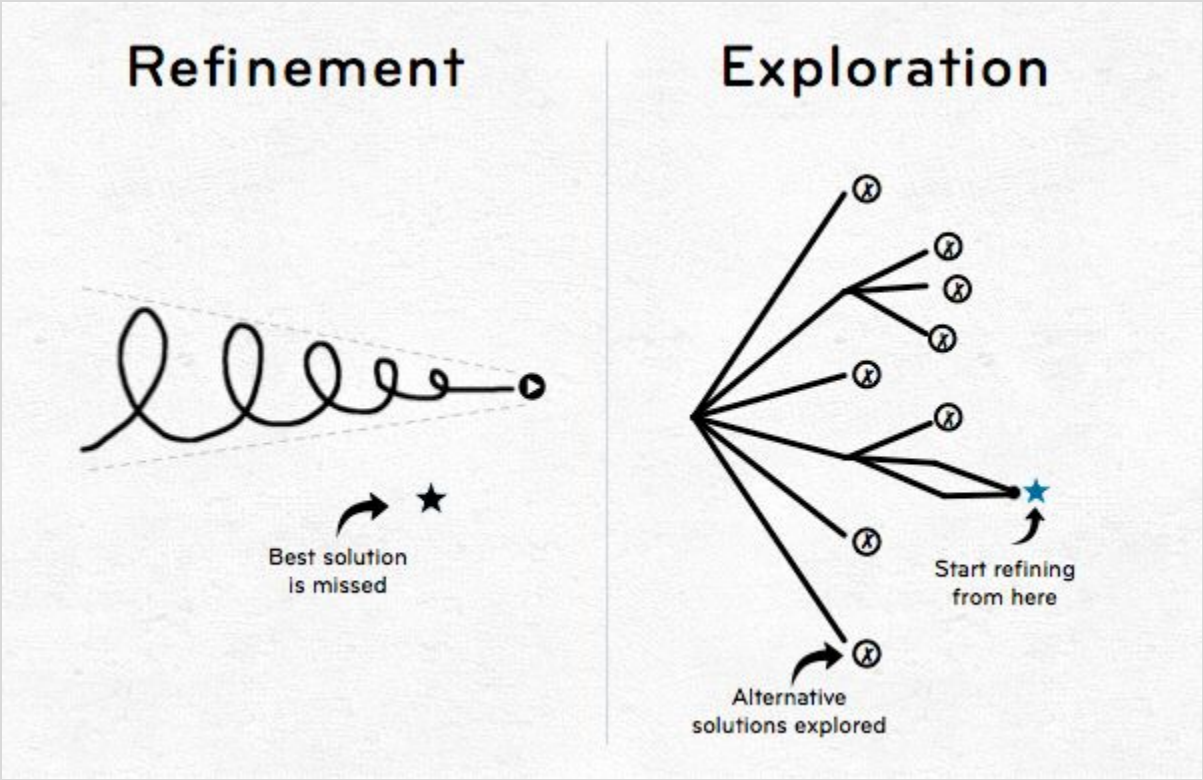


MARI



BRIAN





local max x global max

Case netflix (split x ramp-up)

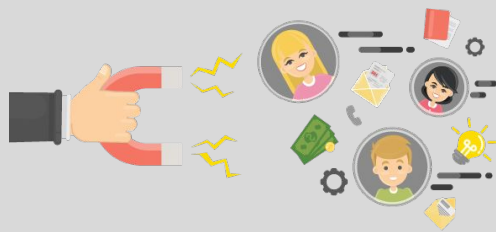
<http://www.business2community.com/online-marketing/2-alexa-500-site-redesigns-inspire-ab-test-0975603#iUcqzEsyLLz8xLXS.97>



JUNE 2011 : NEW DESIGN WAS ROLLED OUT FOR 100% OF USERS

DATA DON'T LIE

↑ RETENTION





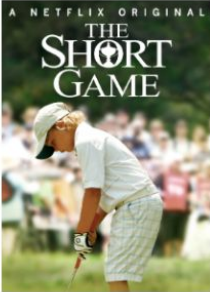
↑ ENGAGEMENT

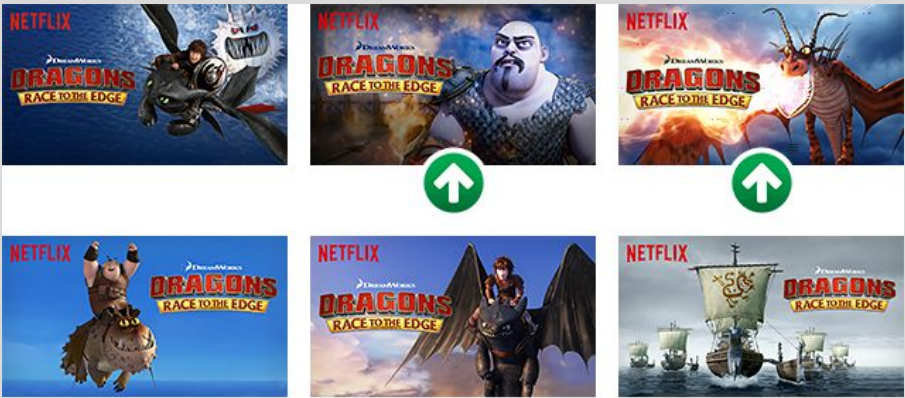
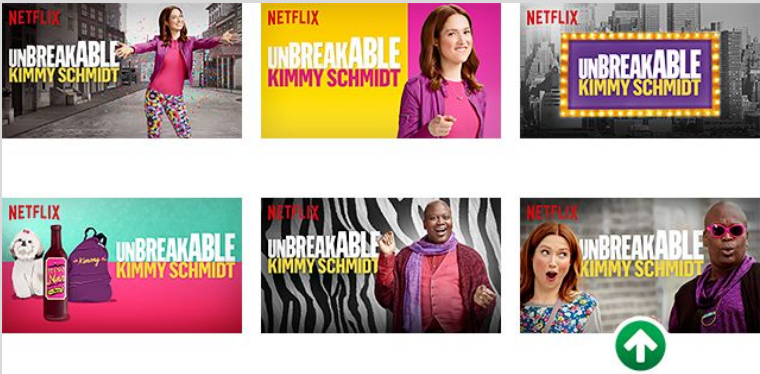


“WHAT PEOPLE SAY AND WHAT THEY DO ARE RARELY THE SAME.”

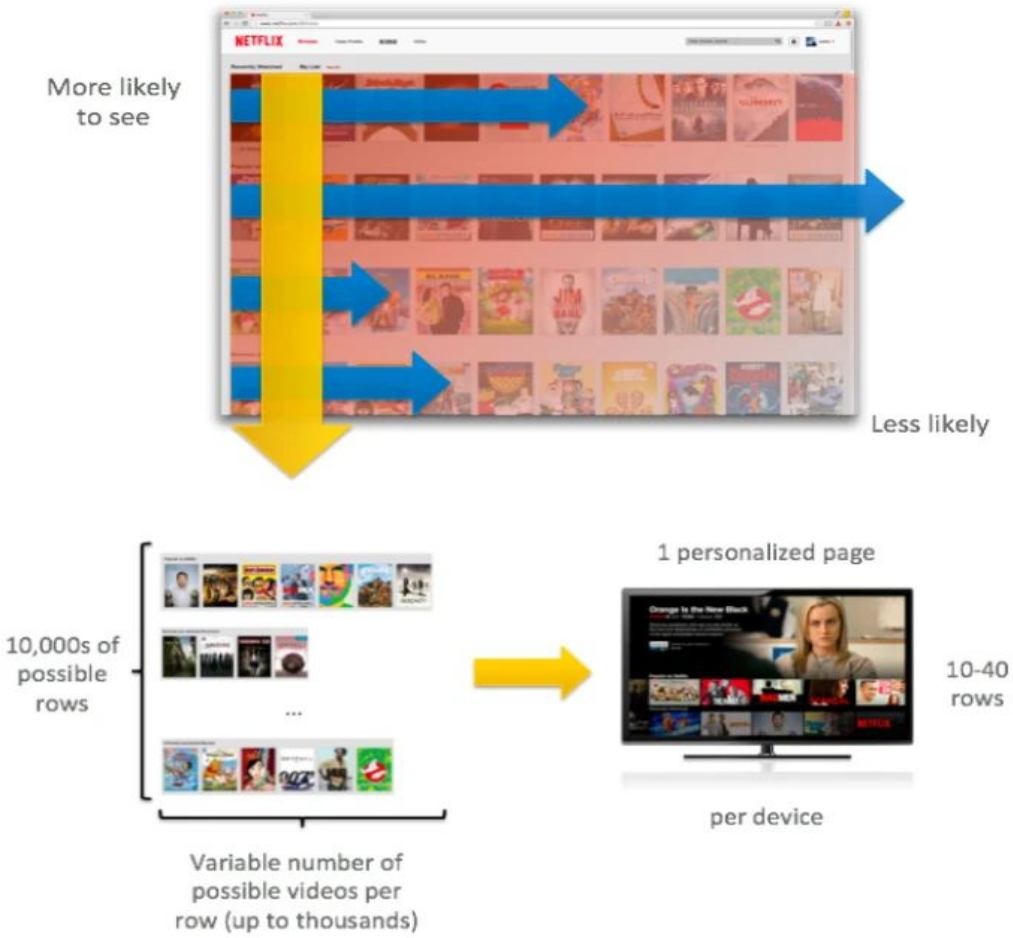
-BRYAN GUMM

NETFLIX

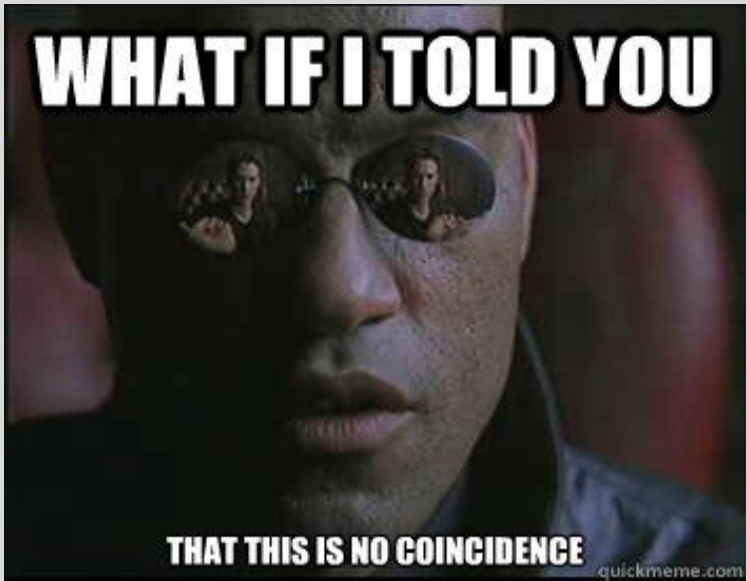
Cells	Cell 1 (Control)	Cell 2	Cell 3
Box Art	<div><p>Default artwork</p></div>	<div><p>14% better take rate</p></div>	<div><p>6% better take rate</p></div>



Case netflix 3



FRAMING EFFECTS



VS.



FRAMING EFFECTS

[https://en.wikipedia.org/wiki/Framing_effect_\(psychology\)](https://en.wikipedia.org/wiki/Framing_effect_(psychology))

AN EXAMPLE OF COGNITIVE BIAS, IN WHICH PEOPLE REACT TO A PARTICULAR CHOICE IN DIFFERENT WAYS DEPENDING ON WHETHER IT IS PRESENTED AS A LOSS OR AS A GAIN

EXAMPLE: PARTICIPANTS WERE ASKED TO CHOOSE BETWEEN TWO TREATMENTS FOR 600 PEOPLE AFFECTED BY A **DEADLY DISEASE**

FACT: TREATMENT A WAS PREDICTED TO RESULT IN 400 DEATHS, WHEREAS TREATMENT B HAD A 33% CHANCE THAT NO ONE WOULD DIE BUT A 66% CHANCE THAT EVERYONE WOULD DIE

POSITIVE

- * TREATMENT A SAVES 200 LIVES
- * TREATMENT B A 33% CHANCE OF SAVING ALL 600 PEOPLE, 66% POSSIBILITY OF SAVING NO ONE

NEGATIVE

- * TREATMENT A 400 PEOPLE WILL DIE
- * TREATMENT B A 33% CHANCE THAT NO PEOPLE WILL DIE, 66% PROBABILITY THAT ALL 600 WILL DIE

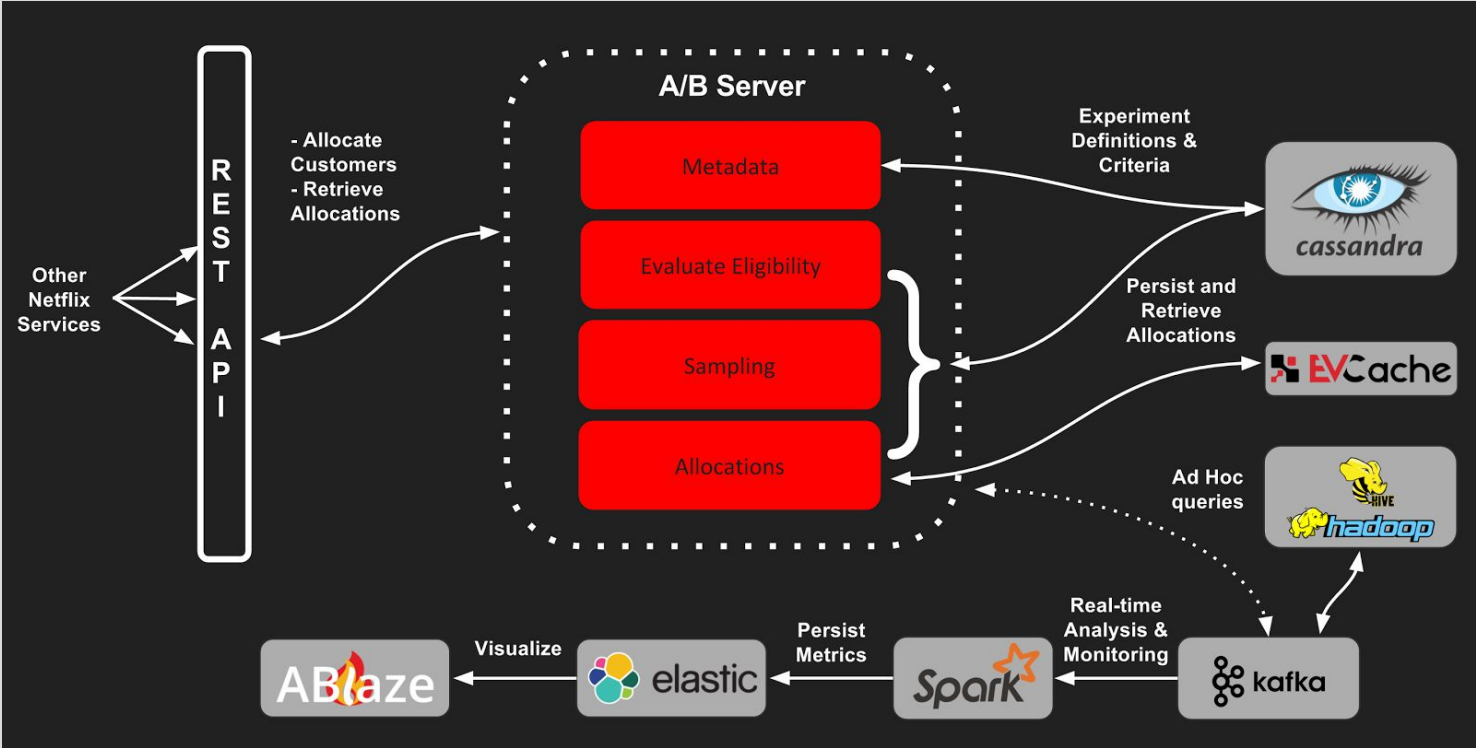
FRAMING EFFECTS

[https://en.wikipedia.org/wiki/Framing_effect_\(psychology\)](https://en.wikipedia.org/wiki/Framing_effect_(psychology))

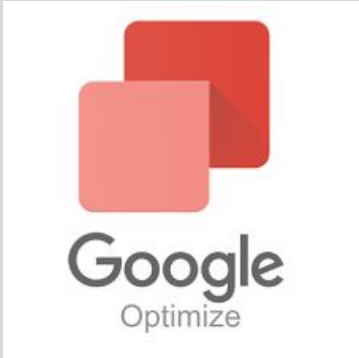
TREATMENT A

- * CHOSEN BY 72% WHEN PRESENTED WITH POSITIVE FRAMING
- * CHOSEN BY 22% WHEN PRESENTED WITH NEGATIVE FRAMING





Tools



Adobe
Target



Visual Website Optimizer



Cool Links

<https://vwo.com/tools/ab-test-significance-calculator/>

<https://unbounce.com/ab-test-duration-calculator/>

<https://docs.google.com/spreadsheets/d/16G4RDOaaSsRc-NoqLqb2tylGNrdDChtp2zMTDVb2f60/edit#gid=0>

SUMMARY

DON'T BELIEVE THE GURUS

WHAT WORKS FOR “EVERYBODY” MAY NOT WORK FOR YOU

DON'T BELIEVE THE HiPPo

HiPPo DON'T THINK. THEY USED TO. YOU ARE BEING PAID TO DO IT

DON'T BELIEVE IN YOURSELF

YOU DON'T KNOW WHAT CONSUMER WANTS. YOU JUST HAVE HYPOTESHIS



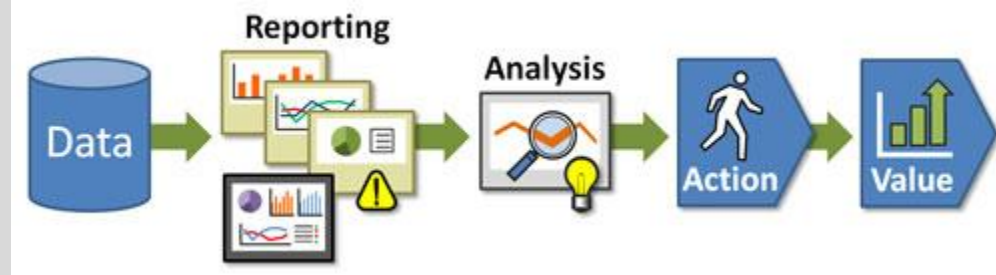
SUMMARY

BELIEVE IN DATA

IT NEVER LIES

BE OPEN TO CHANGE

EXPERIMENT OFTEN, FAIL FAST, BELIEVE IN DATA



TEST EVERYTHING



