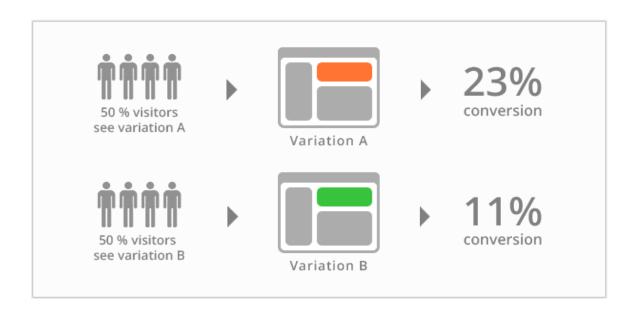
A/B testing

aka split testing, bucket testing, and multivariant testing

- Empirical
- Field study

What is it?

- Controlled experiments
 - Web site
 - Authentic users
- Split users into two groups:
 - Control
 - Test variant
- Cookies can ensure an individual gets consistent version.
- A metric (the overall evaluation criteria, or OEC) eg
 - Click-through rate
 - Purchases



https://vwo.com/ab-testing/

Process

Driving question:

 eg Can I increase click through rates from my home page

Hypothesis:

- eg. Underlined links will outperform my current links

Calculate time to run test:

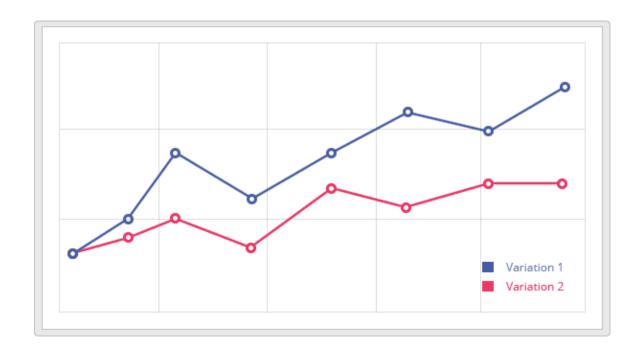
eg A/B Test Duration Calculator.

Run the test:

- x% of users get underlined links
- How to decide x?

Review results

https://vwo.com/ab-testing/



https://vwo.com/ab-testing/

 Holson, Laura M. [2009]. Putting a Bolder Face on Google. New York Times. 1st Mar 2009. http: //www.nytimes.com/2009/03/01/busi ness/01marissa.html

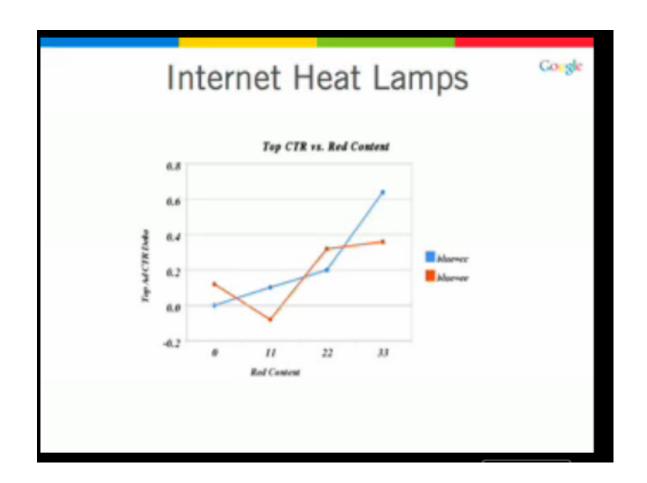


Mayer, Marissa [2009]. "Design @ Google". In: AIGA Design Conference 2009. AIGA. 9th Oct 2009. http://www.aiga.org/content.cfm/video-makethink-2009-mayer

41 shades of blue ... gmail blue was a little more green and the search blue was more blue



More green, worse clicks on search and more abandonment
More blue, brighter the blue, faster to search click



Adding red improves performance

- http://www.nngroup.com/articles/ab-te sting-usability-engineering //
- A/B Testing, Usability
 Engineering, Radical Innovation:
 What Pays Best?
- by <u>Jakob Nielsen</u> on March 26, 2012

	A/B Testing	Usability	Radical Innovation
Cost	Low	Low-medium	High (unless lucky)
Benefits	1–10%	10–100%	100-1,000%
Risk	None	Low	High
Who can do?	Everybody	Everybody	Geniuses
How often?	Weekly	Monthly	Every 10 years
GDP impact	Medium	High	Medium

http://www.itworld.com/article/2703183/it-management/a-b-tests--cut-the-fluff-and-spend-the-pixels-on-design-elements-of-interest-to-users.html

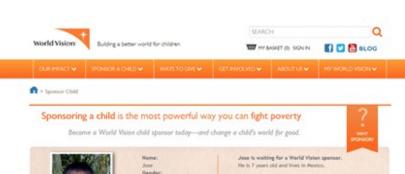
- There are dozens of A/B consultants, tools and compendiums of tips and tricks. Here are a few links to check out:
- <u>Robin Johnson</u>, writing earlier this year in Optimizely, gives you 71 different ideas on things to test, including website copy, visual elements and just plain common sense things such as whether you have a positive or negative spin on what you are trying to sell.
- <u>Uri Bar-Joseph</u>, writing in SearchEngineWatch, has eight rules for A/B testing, including focusing on one variable, choosing your groups randomly and measuring the results carefully.
- <u>Brian Conklin</u> of Vocus has his own nine rules in this blog post, including doing an 10-10-80% split: meaning start with ten percent of your users testing each of two options. Once you determine a winner, send the results to the remaining 80 percent of your audience.
- And if you want to have some fun with A/B tests of the past, take a look at these <u>12 results</u> that were somewhat counter-intuitive from WhichTestWon.com, a commercial A/B testing provider.

12 results somewhat counter-intuitive A/B tests.

https://whichtestwon.com/

https://whichtestwon.com/test/with-s liders-or-without / Oct 13, 2015

- Key Performance Indicator (KPI):
 - clicks on the sponsorship Call To Action button
- Difference between versions:
 Version A: Sponsor a child page
 formatted with sliders
 Version B: Radically redesigned
 sponsorship page, without sliders











And the winner is

- Version B
- 60.4% increase in clicks on the sponsorship button!
- Used:
 - Optimizely used
 - 14 days 8,600 visitors.
- Key differences
 - Story, narrative
 - updated visual flow
 - clickable colored boxes were interactive

Final Page in a 4 Step Sequence

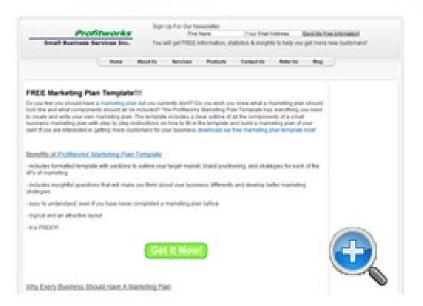




- Both pages are well-designed and both, seemingly, doing a good job
- Version B.
 - video centrepiece, well-structured copy; it should convert
- Version A had 439% higher performance.
- Post-hoc rationalisation
 - text within the image brings focus
 - Form has fewer of fields looks shorter
 - "two images give the page a more authentic and trustworthy feel"

Test 11: A/B Button Color Test: Which Page Drove More Clicks to a Lead Generation Form?

VERSION A



vs. VERSION B

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- Ah! The simple button color test.
- "Green is an affirming color that signifies positive action, in this case it's been used with white text which completely washes the button out. It's hard to know what the button is for at first glance."
- "Version B's yellow and black button may be ugly (and I mean ugly), but it is clear and led to a 14.5% increase in conversions."

Summary

- Studying user's actual behaviour
- Web as experimental platform
- Ease of testing
- A/B testing as an example of
 - Field studies.... Authenticity
 - Large scale empirical study cf Think-Aloud