

A/B/C Split Test			
	PAGE A	PAGE B	PAGE C
Percent of traffic	34%	33%	33%
New sales	244	282	114
Change	N/A	15.57%	-53.28%

Ways design makes a difference

- Position and color of a call to action
- Position on the page of testimonials, if used
- Whether linked elements are in text or as images
- Amount of white space on a page, giving the content space to "breathe"
- Position and prominence of the main heading
- Number of columns used on the page
- Number of visual elements competing for attention
- Attributes of people and objects in photos

Content courtesy of A List Apart: http://www.alistapart.com/articles/designcancripple



Which option performed best?

- Sign up
- Learn More
- Sign up Now
- Join Us Now

Now for the visual material: five options



Which option performed best?

- Family Image
- Change Image
- Barack Video
- Springfield Video
- Sam's Video



Here We Saw

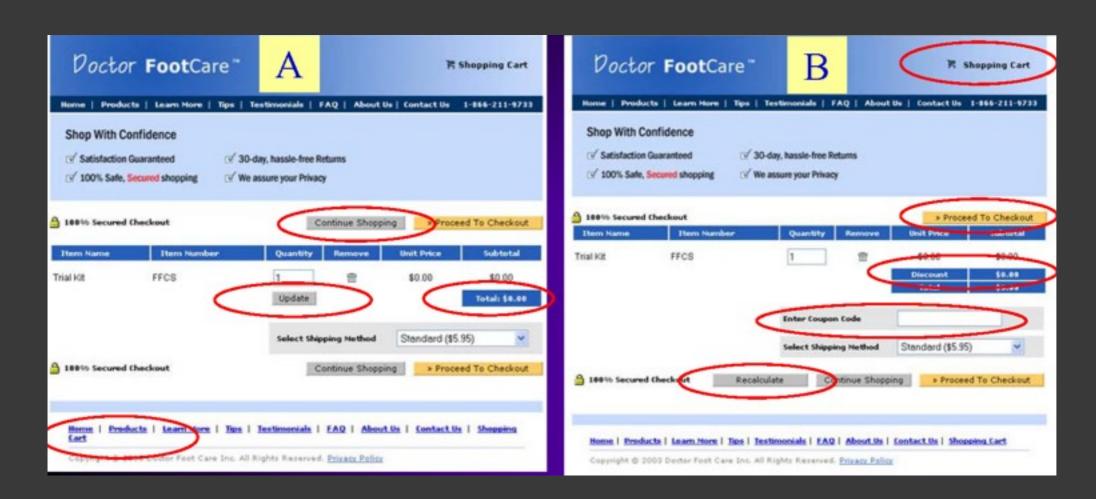
- Small changes: big difference
- Our expectations are often wrong

Large scale changes design

- Making small but consequential differences detectable.
- Small differences accumulate
- Sometimes, there are interactions between two different changes
- Beware of anomalies: investigate further

Unexpected changes in a checkout page

- Conversion rate: the percent of visits to a Web site that include a purchase
- Which version has a higher rate?



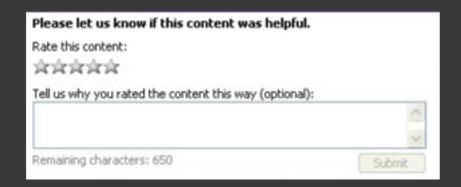
courtesy Greg Linden's blog: http://glinden.blogspot.com/2006/04/early-amazon-shopping-cart.html

Small distractions like extra fields can yield big changes

Office Online Feedback

Fix layout

A



Feedback A puts everything together, whereas feedback B is two-stage: question follows rating

Feedback A just has 5 stars, whereas B annotates the stars with "Not helpful" to "Very helpful" and makes them lighter

How helpful was this information?
Click a star.

Not helpful Click to rate: 3 out of 5 stars

Click a star.

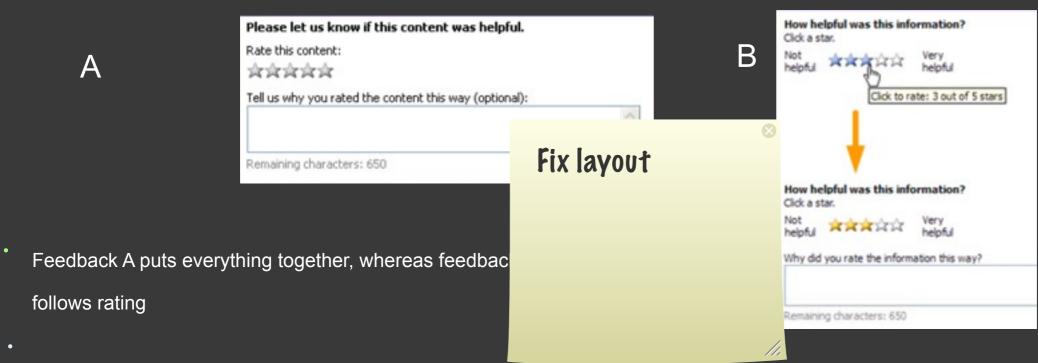
Not helpful was this information?
Click a star.

Not helpful was the information this way?

Remaining characters: 650

Which version has a higher response rate? By how much?

Office Online Feedback



Feedback A just has 5 stars, whereas B annotates the stars with "Not helpful" to "Very helpful" and makes them lighter

Which version has a higher response rate? By how much?

B gets more than double the response rate!

Commitment Escalation

 Iterative design plus controlled experiments can enable you to finetune this stuff

Class Task

- Back to our class website:
- Design I new version of the homepage that will hopefully make access to Instructor/TA info easier
- Make sure to draw the current version along-side, for comparison

Run Experiments at 50/50%

- Novice experimenters run 1% experiments
- To detect an effect, you need to expose a certain number of users to the treatment (based on power calculations)
- Fastest way to achieve that exposure is to run equal-probability variants (e.g., 50/50% for A/B
- But don't start an experiment at 50/50% from the beginning: that's too much risk

 Ramp up over a short period

Ramp-up and Auto-Abo Fix layout. Also, need right link for

- Ramp-up
 - start an experiment at 0.1%
 - do some simple analyses to make sure no egregious problems can be detected
 - ramp up to a larger percentage, and repeat until 50%
- Big differences are easy to detect because the min sample size is quadratic in the effect we want to detect
 - detecting 10% difference requires a small sample and serious problems can be detected during ramp-up
 - detecting 0.1% requires a population 100² = 10,000 times bigger
- Automatically abort the experiment if treatment is significantly worse on OEC or other key metrics (e.g., time to generate page)

Pick the a meaningful yardstick

Run it for long enough

 Sometimes, first use is not the same as what people are familiar with

Start planning your testing now

- Testing necessitates planning
- Think of the features you would like to test - explain what it is designed to do
- Decide what type of experiment you would use to test this feature
 - If in lab what questions?
 - If online create A/B versions