

# Web Experiments

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CMSC434 - Intro to HCI  
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Slides (slightly) modified from Scott Klemmer

Questions?  
Prototype - how much is enough?

ALL CS ugrads are invited to:

Hear about research opportunities  
CMSC 297 (seminar to find out about research opps)  
Eat Pizza

Wed April 20  
5:00PM  
Room CSI 3117

Sign up  
Learn More  
Sign up Now  
Join Us Now



OBAMA '08

GET INVOLVED

Media

Button

JOIN THE MOVEMENT

Email Address

Zip Code

SIGN UP

CONTINUE TO WEBSITE

Baseline sign up rate: 8.26%

STANFORD UNIVERSITY

This image shows a screenshot of the Obama '08 'Get Involved' sign-up page. The page features a white header with the Obama '08 logo, a large blue background with the text 'GET INVOLVED' and a photo of Barack Obama, and a white footer with a sign-up form. The form includes a 'JOIN THE MOVEMENT' link, an 'Email Address' field, a 'Zip Code' field, and a red 'SIGN UP' button. A 'CONTINUE TO WEBSITE' link is also present. Annotations include an arrow pointing to the 'SIGN UP' button labeled 'Button' and an arrow pointing to the Obama photo area labeled 'Media'. Below the screenshot, the text 'Baseline sign up rate: 8.26%' is displayed, along with the Stanford University logo.



OBAMA '08

GET INVOLVED

Button: "Sign Up Now"

JOIN THE MOVEMENT

Email Address

Zip Code

SIGN UP NOW

CONTINUE TO WEBSITE

STANFORD UNIVERSITY

This image shows a modified version of the Obama '08 'Get Involved' sign-up page. The layout is identical to the first image, but the red button now says 'SIGN UP NOW' instead of 'SIGN UP'. An annotation 'Button: "Sign Up Now"' points to the button. The Stanford University logo is visible at the bottom right.



## Measuring Bottom-Line Usability

- Situations in which numbers are useful
  - time requirements for task completion
  - successful task completion
  - compare two designs on speed or # of errors
- Ease of measurement
  - time is easy to record
  - error or successful completion is harder
    - define in advance what these mean
- Do not combine with thinking-aloud. Why?
  - talking can affect speed & accuracy

## For Dustin Curtis, Which performed best?

- I'm on [Twitter](#)
- Follow me on [twitter](#)
- You should follow me on [twitter](#)
- You should follow me on [twitter here](#)

Dustin is a UI Designer with a blog  
From [http://dustincurtis.com/you\\_should\\_follow\\_me\\_on\\_twitter.html](http://dustincurtis.com/you_should_follow_me_on_twitter.html)

## For Dustin Curtis, Which performed best?

- I'm on [Twitter](#) **4.70%**
- Follow me on [twitter](#) **7.31%**
- You should follow me on [twitter](#) **10.09%**
- You should follow me on [twitter here](#) **12.81%**

Dustin is a UI Designer with a blog  
From [http://dustincurtis.com/you\\_should\\_follow\\_me\\_on\\_twitter.html](http://dustincurtis.com/you_should_follow_me_on_twitter.html)

# Amazon Shopping Cart Recs

- Add an item to your shopping cart at a website
  - Most sites show the cart
- At Amazon, Greg Linden had the idea of showing recommendations based on cart items
- Evaluation
  - Pro: cross-sell more items (increase average basket size)
  - Con: distract people from checking out (reduce conversion)
- HiPPO (Highest Paid Person's Opinion) was: stop the project
- Simple experiment was run, wildly successful



From Greg Linden's blog: <http://allthingshippo.com/2006/04/06/amazon-shopping-cart.html>

# Office Online Feedback

A

Please let us know if this content was helpful.

Rate this content:

☆☆☆☆☆

Tell us why you rated the content this way (optional)

Remaining characters: 500

Submit

B

How helpful was this information?

Click a star:

Not helpful ☆☆☆☆☆ Very helpful

Not helpful ☆☆☆☆☆ Very helpful

Why did you rate the information this way?

Remaining characters: 500

Submit

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

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

B gets more than double the response rate!



# Another Feedback Variant



Call this variant C. Like B, also two stage.  
 Which one has a higher response rate, B or C?  
 C outperforms B by a factor of 3.5 !!



# MSN US Home Page

## Proposal: New Offers module below Shopping

**Shopping**

- Landline: Free deluxe compact w/ purchase
- Special promotions at your favorite stores
- Warm fall fashion styles are here
- Save on top brand digital cameras
- Free shipping on furniture for every room

**Advertisements**

**A smart way to buy a diamond**

- Wal-Mart: Back-to-school
- Our editor picks budget electronics
- Get fit & save money: Sports sale

Control

**Shopping**

- Landline: Free deluxe compact w/ purchase
- Special promotions at your favorite stores
- Warm fall fashion styles are here
- Save on top brand digital cameras
- Free shipping on furniture for every room

**Advertisements**

**A smart way to buy a diamond**

- Wal-Mart: Back-to-school
- Our editor picks budget electronics
- Get fit & save money: Sports sale

**Search GM Certified**

With our U2-Point Inspection, GM Certified means no worries

**Online University**

Earn degree from a top school 100% Online. Get Free Info!

**\$200k Loans, Get Low Rates**

Secure Financing and Increase Cash Flow. Click Here Now!

Treatment



## MSN US Home Page Experiment

- **Offers module eval**
  - Pro: significant ad revenue
  - Con: do more ads degrade the user experience?
  - How do we trade the two off?
- **In August, we ran an A/B test for 12 days on 5% of the MSN US home page visitors**

EXP

## Experiment Results

- Clickthrough rate (CTR) decreased 0.49% (p-value <0.0001)  
Small change, but highly significant
- Page views per user-day decreased 0.35% (p-value <0.0001)
- Value of click from home page: X cents  
Net =           Expected Revenue –  
                  direct lost clicks –  
                  lost clicks due to decreased page views

Net was negative (in the millions of dollars), so the offers module did not launch

EXP

## Typography Experiment Color Contrast on MSN Live Search

A: Softer colors

B: High contrast

B: Queries/User up 0.9%  
Ad clicks/user up 3.1%

## Details

- Ramp-up
  - Start experiment at 0.1%
  - Automatically look for problems
  - Ramp up to 50/50
- Auto-abort
  - Automatically stop experiment if new version significantly worse than original
- Randomization
  - Consistent assignment: visitors should see same version on successive visits



# Google Analytics

- Free (up to fairly high uses)
- Analytics
- Funnels
- Goals
- Tie-in to AdWords

## Google Website Optimizer

Change Language: US English

### Convert more visitors - now!

Website Optimizer, Google's free website testing and optimization tool, allows you to increase the value of your existing websites and traffic without spending a cent. Using Website Optimizer to test and optimize site content and design, you can quickly and easily increase revenue and ROI whether you're new to marketing or an expert.

Start testing now »

Sign in with your  
Google Account

Email:

Password:

Stay signed in

[Can't access your account?](#)



★ [Success Stories](#)

Want the latest product news, industry insights, and testing strategies? [Visit the official Website Optimizer blog](#)

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Why guess what site content and designs best convert your visitors, when you can find out directly from them?

**Choose the pages and content to test**  
Using our web-based interface, provide us with the content — headlines, images, or text, for example — and design alternatives that you'd like to test.

**Test these changes with your visitors**  
Website Optimizer will then show these content and design alternatives to your site visitors, all the while monitoring which combinations lead to the highest conversion rates.

**Learn what changes drive the most conversions**  
Our intuitive reports allow even the mathematically-challenged to understand what's working best.



Website Optimizer: Top Feature  
Designed by Google, Inc.  
Web: [http://www.google.com/websiteoptimizer](#)  
Contact: [http://www.google.com/websiteoptimizer/contact](#)