

# Website usability

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# Most sites fail on usability

- Internally focused
- Mirror the organization structure
- Designed for the boss
- Do not involve users in development

# What is usability?

It is measured by -

- Ease of learning
- Efficiency of use
- Memorability
- Error frequency and severity
- Subjective satisfaction

# Why do we have usability problems?

- Technical = make it work
- Artistic/graphics = make it pretty
- Content = put everything up there
- Program = highlight my material

None of them are focused on the users.

# What are the benefits of including usability in web design?

- Success costs less - savings from internet transactions will never be realized unless sites are usable
- If users can't find it, it is not there
- Bad usability equals no customers
- Usable sites result in fewer customer inquiries which equals less staff time

# How can you build usability into your web's design?

- Follow design recommendations from the usability research
  - ◆ Marianne will cover some of these
- Find out about the unique aspects of your site by testing
  - ◆ Colleen will discuss testing

# The usability profession —

- From cognitive psychology
- Focused on Human Computer Interface (HCI)
- Initial work was testing software interfaces

# Web Usability Research

- ***Designing Web Usability***, Jakob Nielsen, 2000
- ***Don't Make Me Think***, Steve Krug 2000
- Keith Instone's Usableweb (<http://usableweb.com/>)
- [usability.gov](http://usability.gov)
- many more in handout

# Users have no patience with --

- Slow sites
- Disorganized sites
- Sites they have to relearn
- Sites that do not clearly convey what is available for users

# Users want fast sites!

- Traditional human factors research shows users lose interest after 5 seconds
- Due to slowness of the web, internet users are more patient - 15 seconds
- Rule of thumb is to limit a page to 35 - 50 KB (Sum of all files that make up the page)

# Users read differently on the web

- Users scan content
- In a study by Nielsen and Morkes -
  - ◆ 79% of users tested always scanned new pages
  - ◆ 16% read word-by-word
- On-screen reading is 25% slower than on paper

# Writing for the web involves —

- “Chunking”
- Inverted pyramid style - conclusions first
- Meaningful subheadings and keywords
- Bulleted lists
- One idea per paragraph
- Half the word count of conventional writing
- Avoiding confusing terminology

# To facilitate scanning, make sure the text is legible

- Text and background must have high contrast
- Avoid all caps and italics
- Avoid text that is too small
- Use plain or extremely subtle backgrounds

# Animation is uniformly annoying

- Users will ignore animated objects thinking they are ads
- Many users will scroll down to avoid animations
- Some users turn off animation in their browsers

# Users will scroll vertically

- Users need a reason to go down the page
- The “fold” is not a constant
- Users were just as likely to have their first click below the fold as above the fold

# Users need to know where they are, but seldom do

- Users don't have a perceived mental model like they do with software
- Users tend to go forward, but the back button is the most frequently used navigation function
- Using the same navigation on every page confuses people

# Build navigation on user behavior

- Never “break” the back button
- Avoid shell structures with generic navigation on every page
- Differences in navigation based on context are helpful as navigation needs to fit with content
- Indications of where you are help

# Users get confused when links are not standard

- Unvisited links should be blue
- Visited links should be reddish or purple
- Don't underline things that are not links

# If your site --

- Has these problems, get your team involved in usability
- Avoids these problems, you may still not be out of the woods. Actual user testing can show you the way.

# Testing Your Web Site

- How do you really know if users are finding the information they need on your site?
- What mistakes are your users making?
- Do they find the “wrong” right answer?
- Are they frustrated? Confused?

# Many Ways to Get Feedback About Your Site

- Usability testing
- Don't forget:
  - ◆ Telephone hotline feedback
  - ◆ Webmail
  - ◆ Feedback from internal users
  - ◆ Focus groups
  - ◆ Online web surveys

# What is Usability Testing?

- Collecting Information about real users
  - ◆ thinking process
  - ◆ problem solving approaches
  - ◆ navigation issues - where do they go?
  - ◆ understanding the site
  - ◆ feelings about the site
  - ◆ measuring their success in finding information

# How Usability Tests Work

- Subject sits at a work station
- Moderator asks the questions
- “Scavenger hunt” test - timed exercises
- Note takers behind one-way glass
- No help- “work as if you were in your office or at home”
- Think aloud process/ empathetic listening
- One hour total with each person

# Minimal Requirements

- A work station
- An Internet connection
- A moderator
- A note taker (can be the moderator)
- A test subject
- A recording device (audio or video)

# How Many Tests ?

- Start with as few as 5 subjects
- Maximum 15-20 subjects
- Maximum 6 tests per day
- Make changes and test again

# Developing User Tasks

- Representative tasks based on the objectives of the site
- Not too obvious but not too difficult
- Broad representation across the site
- Questions in clear language
- Test the questions on yourself

# Results of our tests

- Too many buttons/choices
- Search engine fails
- Too much jargon/technical language
- Too many long text files
- Confusing navigation
- Clickable items didn't look clickable
- Generic categories are not selected

# Results of our tests, cont.

- Users don't see everything
- Design based on your organization
- Design based on your reports
- Contacts are critical/ web & phone

# Implementing Test Results

- Ok, so now what do we do?
- All-day session with facilitator
- Developed a new design
  - ◆ based on input from key staff people
  - ◆ “what goes where” paper exercise
  - ◆ paper prototype testing
  - ◆ more usability testing with prototype

# Thoughts on Usability Testing

- Easier than you think
- Zero tests give zero results
- Pretest questions
- Richer results than customer surveys
- You won't believe it until you see it

# Newer Thought on Usability

- Testing is easier than implementation
- Web sites run by a democracy are more difficult to change
- Scientific evidence is difficult to ignore, but solutions can be subjective
- Don't get defensive about your results
- As the messenger, you may be shot (at)

# Usability is Everywhere

- Life is a usability test
- You know how frustrating and confusing using the web can be
- We want customers to be successful using government sites
- We want finding information/forms/services to be as easy and quick as possible
- The key: watching actual users work