What is Usability?

The **effectiveness**, **efficiency** and **satisfaction** with which specified users achieve specified goals in particular environments. -- ISO 9241

- Effective
- Efficient
- Engaging
- Error Tolerant
- Easy to Learn

-- Whitney Quesenbery
What is Usability?

2013 theme is "Healthcare: Collaborating for Better Systems"
Research Methods
Lots of Approaches

● Analytics / Log Analysis
● Click Heatmaps
● Surveys
● Feedback Forms
● Interviews
● Focus Groups
● **Usability Testing**
The Gurus

Jakob Nielsen  
Nielsen Norman Group

Steve Krug  
Advanced Common Sense

Jared Spool  
User Interface Engineering
Steve Krug

Excellent books »

The Manuals

Steve Krug

DON'T MAKE ME THINK
A Common Sense Approach to Web Usability
SECOND EDITION

ROCKET SURGERY MADE EASY
The Do-It-Yourself Guide to Finding and Fixing Usability Problems
Usability Testing
Seeing How People Actually Use Your Product
Planning a Usability Test
So You Want to Test...

- What tasks should we test?
- What kind of users should we test?
- How will we recruit participants?
Deciding on Tasks

- What are the **critical** things users would need to do?
- Turn them into **scenarios**.
Sample Tasks

1. Think of a topic you’re currently interested in or researching for a class, project or personal interest. Use this test search page to search for books, articles or other resources on this topic.
Sample Tasks

2. You’ve heard that Duke Libraries subscribes to RefWorks, and you’d like to learn more about this tool. Show me how you’d locate info about RefWorks from the Duke Libraries website.
Who to Test

- Primary target audience (if you can)
- But don't worry too much about "representative sample"

"Recruit loosely and grade on a curve."

Source: Steve Krug, Don't Make Me Think
Usability Test Roles
The People Involved & What They Do
Observer(s)
Behind this mirror!

Participant
In the driver's seat

Facilitator
Next to Participant

Source: Flickr user Peter Gerdes
http://www.flickr.com/photos/petergerdes/4004256777/
Facilitator

- Meet/greet
- Tour guide for test
- Keep ‘em talking
- Stay reassuring & neutral

Source: Flickr user Thomas Link
http://www.flickr.com/photos/l-i-n-k/3654390818/in/photostream/
Participant

- Show up on time
- “Think aloud”
- Try to complete tasks

Source: Flickr user Ram Yoga
http://www.flickr.com/photos/ramyoga/298623422/in/photostream/
Observer(s)

- Watch closely
- Take brief, informative notes

Source: Flickr user joeshoe
http://www.flickr.com/photos/joeshoe/5599463296/in/photostream/
A Typical, Traditional Test
Anatomy of a User Test

- Intro
- Pre-test Questions
- General Reactions
Anatomy of a User Test

- Task Completion
- Followup
- Wrapup
Web browser should be open to Google or some other "neutral" page

Hi, __________. My name is __________, and I’m going to be walking you through this session today.

Before we begin, I have some information for you, and I’m going to read it to make sure that I cover everything.

The first thing I want to make clear right away is that we’re testing the site, not you. You can’t do anything wrong here.

As you use the site, try to think out loud: to say what you’re looking at, what you’re trying to do, and what you’re thinking. This will be a big help to us.

Also, please don’t worry that you’re going to hurt our feelings. We’re doing this to improve the site, so we need to hear your honest reactions.

If you have any questions as we go along, just ask them. I may not be able to answer them right away, since we’re interested in how people do when they don’t have someone sitting next to them to help. But if you still have any questions when we’re done I’ll try to answer them then.
Data Analysis & Reporting

- Depends on data collected
- Traditionally, a long complicated report

Source: Morae Manager User Manual
Morae®

Improve Your Final Product

Morae is a leading usability software that removes the guesswork from your decisions and helps you make products people love. Record user interactions, efficiently analyze results, and instantly share your findings with anyone, anywhere.

Overview Video

What’s New in Morae 3.3

Morae 3.3 comes equipped with real-time chat for communicating during testing, enhanced pluggable architecture for a customizable testing experience, improved eye-tracking capabilities, searchable table of contents for easy sharing, and more.

YOU MIGHT ALSO LIKE...

Camtasia Studio & Camtasia for Mac

http://www.techsmith.com/morae.html
Example Project Study

For use as a learning tool, the Example Project Study configuration was used to create recordings found in Manager's Example Project.

Source: Morae Recorder User Manual
Source: Morae Manager User Manual
Practical Variations
It Doesn't Have to Be Complicated
"In the beginning, though, usability testing was a very expensive proposition. You had to have a usability lab with an observation room behind a one-way mirror, and at least two video cameras so you could record the users’ reactions and the thing they were using. You had to recruit a lot of people so you could get results that were statistically significant. It was Science. It cost $20,000 to $50,000 a shot. It didn’t happen very often."
Why You Only Need to Test with 5 Users

Some people think that usability is very costly and complex and that user tests should be reserved for the rare web design project with a huge budget and a lavish time schedule. Not true. Elaborate usability tests are a waste of resources. The best results come from testing no more than 5 users and running as many small tests as you can afford.

In earlier research, Tom Landauer and I showed that the number of usability problems found in a usability test with $n$ users is:

$$N(1-(1-L)^n)$$

where $N$ is the total number of usability problems in the design and $L$ is the proportion of usability problems discovered while testing a single user. The typical value of $L$ is 31%, averaged across a large number of projects we studied. Plotting the curve for $L=31\%$ gives the following result:

Source: Jakob Nielsen
http://www.useit.com/alertbox/20000319.html
“Do-it-yourself” usability tests are definitely qualitative. The purpose isn’t to **prove** anything; it’s to get insights that enable you to **improve** what you’re building."
Guerilla Testing
Get Out of the Lab

PROS
● Minimizes administrative overhead
● On-the-fly recruitment

CONS
● Brevity limits the tasks
● Few staff see live test
So, what would you do next?

I think I'd click here...
Observed DIY Usability Test
Get a Roomful of Observers

PROS
● Good for 'culture of usability'
● More eyes & minds on the problems

CONS
● Investment of staff time
● Longer tests / likely fewer users
"After the debriefing, it’s a good idea to summarize [the] testing in a short email. By short, I mean it should take no more than two minutes to read—and no more than 30 minutes to write. Think bullet points, not paragraphs.

Source: Steve Krug
Rocket Surgery Made Easy
Quick Findings reports

"Formal reports are the most common way of documenting usability studies, but informal reports are faster to produce and are often a better choice."

Source: Jakob Nielsen
http://www.useit.com/alertbox/20050425.html
Remote & Unmoderated
Newer, Leaner Approaches to Usability Testing
Find Your Site's Biggest Problems in 1 Hour

- Watch usability testing videos of your site's visitors speaking their thoughts
- Receive written answers to your questionnaire
- Ask participants follow-up questions
- Boost conversions by discovering where—and why—users get stuck

Get all this for $39 per participant

Pricing & Sign Up
Watch visitors use your website

1-year money-back guarantee

"Use it and your site will get better."
Evan Williams | twitter Co-Founder

UserTesting.com is loved by the Top 10 Web Properties in the U.S.

Google Microsoft Yahoo! facebook Aol.
amazon.com Ask Wikipedia Apple comcast

...and 10,000+ businesses worldwide

Source: comScore Top Web Properties, July 2014

How It Works

1. Create Your Test
2. We Notify Users
3. Get Feedback
4. Share Results

Watch video (2min)
**Five Second Test**

Are your landing pages easy to understand?

Five second tests help you understand people's first impressions of your designs.

By finding out what a person recalls about your design in just 5 seconds you can ensure that your message is being communicated as effectively as possible.

- Do a five second test
- View a sample report

**Click Test**

Where do your users click?

Click tests help you find out how your users interact with your interfaces.

By finding out where users click on your interfaces you can quickly find out whether your calls to action are working effectively.

- Do a click test
- View a sample report

**Nav Flow**

Is your website easy to navigate?

Navflow helps you find out how users navigate around your websites and applications.

Navflow lets you combine multiple click tests into funnels that help you identify exactly which page is causing your users difficulty when completing multi-step processes.

- Do a nav flow test
- View a sample report
Landing page optimization for your mocks and wireframes.

Fivesecondtest helps you fine tune your landing pages and calls to action by analyzing the most prominent elements of your design.

sign up for free

How it works

1. Create a new test
Upload a screenshot or mockup, set some questions you want answered and wait for the feedback to roll in!

2. Users complete your test
Testers have five seconds to view your image and must then answer the questions you have set.

3. View your results
We collect all of the responses for you, extract the frequent keywords and then present the data with beautiful graphs.

Jared Spool
User Interface Engineering

FiveSecondTest.com

Latest news

fivesecondtest created a free usability test for my site. Take mine to provide constructive comments & criticism at http://t.co/ufeXNPuA RT?
Top Keywords

Raw Response Data

cant think of anything

coldtek

too busy

Anonymous

cluttered?

Tholomew
Task: Where would you click to sell a website?

Click Analysis

Result Summary

- Total responses: 104
- Average duration: 6.7s

Flippa - The #1 Marketplace for Buying and Selling Websites.

Featured Listings  Latest Listings  Ending Soon  Just Sold  Ended Unsold

Featured Websites and Domain Names For Sale

<table>
<thead>
<tr>
<th>Website Description</th>
<th>PRICE</th>
<th>BIOS</th>
<th>ENDING</th>
</tr>
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<tr>
<td>Established Web Design Business with Builder</td>
<td>$4000</td>
<td>3</td>
<td>Oct 11th at 3:16am</td>
</tr>
<tr>
<td>Online News Engine - Animated, 25% of Users, $5,000 Year 2</td>
<td>$5000</td>
<td>6</td>
<td>3 Jan at 3:16am</td>
</tr>
</tbody>
</table>

Print this page

theclicktest.com

Path Analysis

Step 1
success rate 84.7%
failure rate 13.5%
abandon rate 1.8%
completion time 15.11s
85% total succeeded

Step 2
success rate 67.4%
failure rate 31.2%
abandon rate 1.4%
completion time 20.35s
57% total succeeded

Result Summary

170 total responses
30.6% success rate
65.3% fail rate
4.1% abandon rate
10.6s average duration

print this page

navflow.com
Duke Libraries
Usability Testing & Experience
Usability
At Duke Libraries

- Assessment & User Experience Dept formed 2013
- 1-2 tests per month
- Conduct tests in Perkins lobby
Example Project
Library Website Redesign
Observed Testing
Included some tasks using similar sites
Agile Development
& Usability Testing
Usability Tests in Agile Dev.

- **assign resources** for usability tests on an equal footing with the coding

- **design storyboards and prototypes** [...] and use these tools as reference points

- **parallel track approach**: user experience work is continuously done one step ahead of the implementation work.

- **foundational user research**: conduct before a development project even starts.

Source: Jakob Nielsen

Mobile App Development
& Usability Testing
Thanks for listening!
More questions?

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