

Get It Right the First Time Through Cheap and Easy DIY Usability Testing

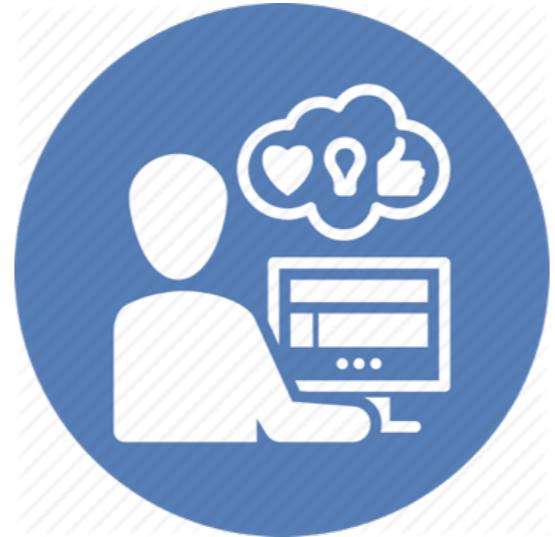
Wednesday, July 22th
Drupal GovCon

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Overview

- Introduction
- What is Usability
- Who, What, Where, and When
- Free and/or Inexpensive Tools



Introduction

Disclaimer

Let's get this out of the way first!

Disclaimer

We are not Usability experts

- We'll share easy DIY techniques & tools

We won't tell you how to fix your website

- But we will point you in the right direction

Scope

What we'll cover and what we won't.

What we will cover

- What is usability?
- Why should I bother?
- How can I test my site?
- How do I keep my site usable?

What we won't cover

- Usability best practices
- Statistical analysis of results
- Every type of usability test



What is Usability?

What is usability?

“Usability testing refers to evaluating a product or service by testing it with representative users. The goal is to identify any usability problems, collect qualitative and quantitative data and determine the participant's satisfaction with the product.”

usability.gov

What is usability?

“If there's one thing you learn by working on a lot of different Web sites, it's that almost any design idea—no matter how appallingly bad—can be made usable in the right circumstances, with enough effort.”

Steve Krug, author
*Don't Make Me Think:
A Common Sense Approach to Web Usability*

Keep in mind

- Popular ≠ Good
- Attractive ≠ Usable
- Ugly ≠ Unusable



What, when,
and who to test?

What to test?

Anything or everything?

What should you test?

- Information Architecture
- Navigation
- User Interface elements
- New Functionality
- Critical User Interactions
- Everything!

When to test?

Is it too soon, or too late?

When to test

- The sooner the better
- Tests should be part of the change process
- Test early and test often!

Who to test?

Your opinion probably isn't the one that matters.

Potential test subjects

- Actual site users
- Representative site users
- Crowdsourced
- Artificial intelligence

Actual site users

Pros:

- Most relevant to site

Cons:

- May have limited availability
- May require compensation

Representative users

Pros:

- Relevant to site
- More relevant than crowdsourced and AI

Cons:

- Only as relevant as your recruiting
- May require compensation

Crowdsourced

Pros:

- Readily available
- Likely more relevant than AI

Cons:

- May not closely model actual site users
- May require compensation

Artificial intelligence

Pros:

- Readily available
- Complete tests in real time

Cons:

- May not closely model actual human users

Which is right for you?

- What kind of site are you testing?
- What is your site's demographic?
- What access do you have to site users?



How to test?

Types of tests

One size does not fit all!

Formative Tests

- Used throughout the change process.
- Support tool for decision making.
- Different tools for different stages.

Summative Tests

- Generally QA testing.
- Determine if finished feature/site is usable.
- Confirm improved usability.
- Used prior to making changes to determine and document any usability problems.

Types of testing

- Analytics
- User Testing
- Usability Testing

Usability testing

- Based on task completion.
- Usually measurable.

User Testing

- Based on user opinion.
- Not tied to specific task completion.

Analytics

- Measure of actual user behavior.
- May suggest usability problems.
- Not a substitute for usability testing.
- May provide baseline to measure success of plans derived from usability testing.

Analytics

It takes time to collect data; start today!

Web Analytics

Formative

- Records actual site visitor interaction.
- Can suggest usability problems.

Web Analytics

Possible tools

- *Google Analytics* (Google)
- *WebTrends Analytics* (WebTrends)
- *AWStats* (AWStats)

Heat Maps

Formative

- Records specific actual site visitor interaction: mouse click and scroll depth.
- Can suggest usability problems.

Heat Maps

Possible tools

- *Crazy Egg* (*Crazy Egg*)
- *Hotjar* (*Hotjar*)
- *Lucky Orange* (*Lucky Orange*)
- *Google Analytics** (*Google*)

*sort of

User testing

Opinions are like noses, everyone's got one.

User Surveys

Formative

- Ask users what they like or don't like.
- Good starting point for refining or adding new features.

User Surveys

Possible tools

- Paper
- *SurveyMonkey* ([SurveyMonkey](#))
- *SurveyGizmo* ([Widgix](#))
- *Qualtrics* ([Qualtrics](#))

A/B & Multivariate Tests

Formative

- Users are randomly given an implementation.
- Determine which implementation is most effective based on conversion rates.

A/B & Multivariate Tests

Possible tools

- *Google Website Optimizer* (Google)
- CMS Specific tools (e.g. Drupal *Multivariate*)
- *Optimizely* (Optimizely)

Usability testing

Choose the test based on your question.

Open Card Sort

Formative

- Participants organize a list of items into categories they provide.

Open Card Sort

Possible tools

- Index cards
- *Cardsort* (Optimal Workshop)
- *UserZoom* (UserZoom)

Closed Card Sort

Formative

- Participants organize a list of items into categories you provide.

Closed Card Sort

Possible tools

- Index cards
- *Cardsort* (Optimal Workshop)
- *UserZoom* (UserZoom)

Tree Test

Formative

- Asks test participants where they would go to find specific content.
- Tests the organization of content if navigation labels make sense to users
- Test website's pre-defined navigation.

Tree Test

Possible tools

- Index cards
- *Treejack* (Optimal Workshop)

Expectancy Test

Formative

- Tests a user's impressions of an early prototype of the interface.
- Typically paper prototype, wireframes, or design concepts.

Expectancy Test

Possible tools

- Paper Prototype
- Wireframes
- Design Concepts

5-Second Usability Test

Formative

- Tests individual pages (not homepage) for a specific scenario and task.
- Not suitable for testing complex systems or user interaction.

5-Second Usability Test

Possible tools

- Paper Prototype
- Wireframes
- Design Concepts
- *FiveSecondTest* (UsabilityHub)

Visual Affordance Test

Formative

- Tests the “Clickability/Tappability.”
- Show subject web page or design concept.
- Subject indicate every item believed clickable, and items believed not clickable.

Visual Affordance Test

Possible tools

- Paper Prototype
- Wireframes
- Design Concepts

Click Test

Summative

- Provide scenario and task.
- User clicks on the design element to complete task.

Click Test

Possible tools

- Paper Prototype
- Wireframes
- Design Concepts
- *Chalkmark* (Optimal Workshop)
- *Flippa* (UsabilityHub)

Sample-of-One Test

Summative

- Document fundamental errors in interface layout, labels, content organization, affordance, and functionality
- Use single subject who fits main persona.

Sample-of-One Test

Possible tools

- *Silverback* (Clearleft)
- *OpenHallway* (OpenHallway)
- *TryMyUI* (TryMyUI)

Performance Test

Formative or Summative

- Can be used to look for problems in existing site or confirm function in a new site.
- Provide participants a task with a scenario
- Observe user interact with website.

Performance Test

Possible tools

- *Silverback* (Clearleft)
- *OpenHallway* (OpenHallway)
- *TryMyUI* (TryMyUI)

Free Exploration Test

Summative

- Observe users interaction with website for set period of time (5 minutes?).
- Use when navigation is no longer an issue.

Free Exploration Test

Possible tools

- *Silverback* (Clearleft)
- *OpenHallway* (OpenHallway)
- *TryMyUI* (TryMyUI)



Free and Inexpensive Testing Tools

Survey Monkey

Likes:

- Robust question functionality & reporting.
- Filter response data by response or URL.
- Data export to allow manipulation in excel.

Be Aware:

- Some features require more pricey plans.

Survey Monkey

Unlock 1Password to save this Login

Welcome to SurveyMonkey!

SurveyMonkey®

My Surveys Examples Survey Services Plans & Pricing

Upgrade DesignHammerSurveys + Create Survey

Let's stay in touch! Update your email address to get our latest news and updates. [Update now →](#)

ALL SURVEYS

TITLE	MODIFIED	RESPONSES	ACTIONS
NISS Affiliate Benefits Created 03/13/2015	03/31/2015	28	 ...
Carolina Journal Online User Survey Created 11/13/2014	01/14/2015	615	 ...
Draft 1 - DH content survey Created 11/19/2014	11/19/2014	0	 ...
Carolina Journal User Survey - for JLF internal review Created 11/06/2014	11/11/2014	5	 ...
Carolina Journal User Survey - reweighted Created 10/31/2014	11/06/2014	10	 ...
Carolina Journal User Survey test Created 10/27/2014	10/30/2014	0	 ...

+ Create Survey

ALL SURVEYS: 6 of 6

Need people to take your survey?

Choose from millions of people ready to take your survey with SurveyMonkey Audience.

 SurveyMonkey Audience

Buy a Targeted Audience »

Get Survey Help, Ideas & Tips

[Learn how to survey like a pro](#)

[Find more survey tools to help you](#)

Feedback

Survey Monkey

The screenshot shows the SurveyMonkey interface for a survey titled "Carolina Journal Online User Survey".

Header: The top navigation bar includes links for "My Surveys", "Examples", "Survey Services", "Plans & Pricing", "Upgrade", "DesignHammerSurveys", and a prominent green button "+ Create Survey".

Survey Summary: A yellow banner at the top of the main content area reads "Organize your open ended responses using text analysis. Switch to GOLD →".

Design Summary: This section displays survey details: "Carolina Journal Online User Survey" (Created on 11/13/2014), "Questions: 13, Pages: 8", "Survey language: English", "Theme: Carolina Journal User Survey Oct. 2014", "Logo added", and "Logic added". It also features "Edit Design" and "Preview Survey" buttons.

Response Summary: This section shows "615 Total Responses" and the survey is marked as "CLOSED". The overall survey status is "Overall Survey Status". Below this, a table lists response sources: "Web Link 1" (Responses: 436, Since 11/13/2014, CLOSED), "CJ website popup" (Responses: 160, Since 11/20/2014, CLOSED), "CJ Twitter Link" (Responses: 4, Since 11/25/2014, CLOSED), "JLF Twitter Link" (Responses: 10, Since 11/25/2014, CLOSED), "Facebook: Carolina Journal" (Responses: 2, Since 11/25/2014, CLOSED), and "Facebook: John...ke Foundation" (Responses: 3, Since 11/25/2014, CLOSED).

Footer: The bottom left corner features the "designHAMMER" logo with the tagline "BUILDING SMARTER WEBSITES".

Survey Monkey

The screenshot shows the SurveyMonkey interface for a "Carolina Journal Online User Survey".

Header: surveymonkey.com, Master Password input field, "Unlock 1Password to save this Login" button.

Breadcrumbs: SurveyMonkey Design : Carolina Journal Online User Survey

Header Buttons: Upgrade, DesignHammerSurveys dropdown, + Create Survey button.

Navigation: My Surveys, Examples, Survey Services, Plans & Pricing.

Callout: Own your brand with our white label surveys. Upgrade to PLATINUM →

Page Title: Carolina Journal Online User Survey

Page Actions: Summary, Design Survey, Collect Responses, Analyze Results, Preview & Test, Print, Next →

Builder Area: PAGE 1, Page Logic, More Actions, P1: Survey Intro..., Builder sidebar with options: Multiple Choice, Dropdown, Matrix / Rating Scale, Matrix of Dropdown Menus.

Survey Content:

- Header:** CAROLINA JOURNAL ONLINE logo, Carolina Journal Online User Survey title.
- Section:** Survey Introduction
- Text:** Thank you for helping us improve the Carolina Journal!
- Text:** Your answers to this survey will remain confidential, and will help us create a better Carolina Journal experience for you.
- Text:** This survey contains 7 questions about the Carolina Journal and how you consume and share news coverage in

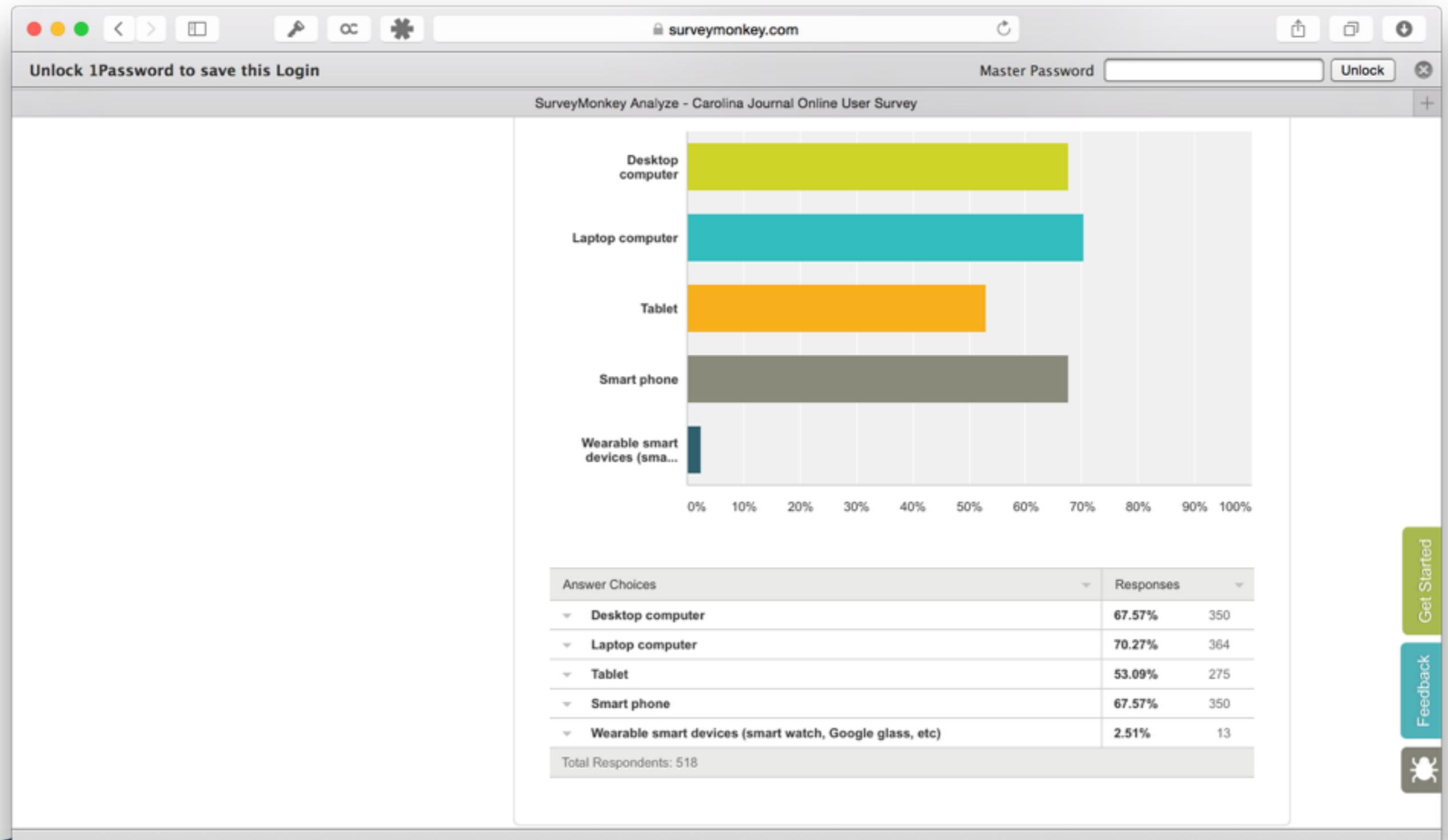
Side Navigation: Get Started, Feedback!

Survey Monkey

The screenshot shows the SurveyMonkey interface for managing survey collectors. At the top, there's a navigation bar with links for 'My Surveys', 'Examples', 'Survey Services', 'Plans & Pricing', 'Upgrade', 'DesignHammerSurveys', and a prominent green button '+ Create Survey'. Below this is a yellow banner with the text 'Organize your open ended responses using text analysis. Switch to GOLD →'. The main content area is titled 'Carolina Journal Online User Survey' and features tabs for 'Summary', 'Design Survey', 'Collect Responses', and 'Analyze Results'. Under the 'Collect Responses' tab, there's a section titled 'Survey Collectors' with a green button '+ New Collector'. A table lists six collectors:

COLLECTORS: 6 of 6					
	NICKNAME	STATUS	RESPONSES	DATE MODIFIED	
	Web Link 1 Created 11/13/2014	CLOSED	436	Wednesday, January 21, 2015 11:19 AM	
	CJ website popup Created 11/20/2014	CLOSED	160	Wednesday, January 21, 2015 11:19 AM	
	CJ Twitter Link Created 11/25/2014	CLOSED	4	Wednesday, January 21, 2015 11:19 AM	
	JLF Twitter Link Created 11/25/2014	CLOSED	10	Wednesday, January 21, 2015 11:19 AM	
	Facebook: Carolina Journal Created 11/25/2014	CLOSED	2	Wednesday, January 21, 2015 11:19 AM	
	Facebook: John Locke Foundation Created 11/25/2014	CLOSED	3	Wednesday, January 21, 2015 11:19 AM	

Survey Monkey



Survey Monkey

Unlock 1Password to save this Login

surveymonkey.com

Master Password Unlock (X)

SurveyMonkey Analyze - Carolina Journal Online User Survey

CURRENT VIEW (?)

+ FILTER + COMPARE + SHOW

No rules applied (?)

Rules allow you to FILTER, COMPARE and SHOW results to see trends and patterns. [Learn more »](#)

SAVED VIEWS (4) (?)

Original View (No rules applied) (eye)

CJ website popup

Social Media Combined

Email

+ Save as...

EXPORTS (?)

SHARED DATA (?)

No shared data

Sharing allows you to share your survey results with others. You can share all data, a saved view, or a single question summary. [Learn more »](#)

RESPONDENTS: 615 of 615

Export All Share All

Question Summaries Data Trends Individual Responses

All Pages (▼) (◀) (▶)

Responses (by week)

Chart Type (▼) Trend by... (▼) Zoom (▼)

First: 11/14/2014 Zoom: 10/20/2014 to 1/12/2015

Date	Responses
10/20/2014	0
10/27/2014	0
11/10/2014	0
11/17/2014	370
11/24/2014	125
12/1/2014	55
12/8/2014	15
12/15/2014	25
12/22/2014	15
12/29/2014	25
1/5/2015	10
1/12/2015	5

Weekly (Starting on the date)

Get Started

Feedback

designHAMMER

Survey Monkey

The screenshot shows the SurveyMonkey Analyze interface for the "Carolina Journal Online User Survey".

Header: surveymonkey.com, Master Password input field, Unlock button.

Main Navigation: SurveyMonkey Analyze - Carolina Journal Online User Survey, SurveyMonkey logo, Upgrade button, DesignHammerSurveys dropdown, + Create Survey button.

Sub-navigation: My Surveys, Examples, Survey Services, Plans & Pricing.

Middle Section: Save 25% each month and get unlimited responses. [Switch to an annual plan →](#)

Survey Title: Carolina Journal Online User Survey

Current View: CURRENT VIEW dropdown, + FILTER, + COMPARE, + SHOW buttons. No rules applied. Rules allow you to FILTER, COMPARE and SHOW results to see trends and patterns. [Learn more »](#)

Saved Views: SAVED VIEWS (4) dropdown, listing: Original View (No rules applied), CJ website popup, Social Media Combined, Email.

Respondent Summary: RESPONDENTS: 615 of 615, Export All, Share All buttons. Buttons for Question Summaries, Data Trends, Individual Responses. Respondent #615 dropdown, All Pages dropdown.

Respondent Profile: #615, COMPLETE status, Collector: CJ website popup (Web Link), Started: Wednesday, January 14, 2015 3:32:29 PM, Last Modified: Wednesday, January 14, 2015 3:36:14 PM, Time Spent: 00:03:44, IP Address: 174.109.223.134. Edit, Delete, Export buttons.

Survey Questions: PAGE 2, Q1: Within the past 12 months, have you visited the Carolina Journal website, or are subscribed to CJ emails?

Side Navigation: Get Started, Feedback, DesignHammer logo.

CrazyEgg

Likes:

- Variety of ways to filter/visual data
- Can test mobile and desktop

Be Aware:

- Not real time.
- Not cheap to monitor entire sites.

Crazy Egg

The screenshot shows the Crazy Egg Dashboard interface. On the left, a sidebar menu includes links for DesignHammer, Snapshots, Options, Upgrade, Account, Help, What's my code?, Get RSS notifications, and Exported snapshots. The main area displays a summary of snapshots: 17 Running, 0 Completed, 0 Other, and a Total of 17. A progress bar indicates 1% visits used, with 584 / 100,000 visits completed. Below this, a table lists five running snapshots for the DesignHammer site:

		status	duration	visits	devices	actions	results
<input type="checkbox"/>	DesignHammer About Page <small>(i)</small>	running	6 days	38	desktop	<small>gear</small>	view results
<input type="checkbox"/>	DesignHammer Blog Page <small>(i)</small>	running	6 days	73	desktop	<small>gear</small>	view results
<input type="checkbox"/>	DesignHammer Contact Page <small>(i)</small>	running	6 days	69	desktop	<small>gear</small>	view results
<input type="checkbox"/>	DesignHammer Drupalgive Page <small>(i)</small>	running	5 days	3	desktop	<small>gear</small>	view results

Crazy Egg

The screenshot shows a heatmap analysis of a website's homepage. The URL is https://designhammer.com/. The page has 221 visits and 164 clicks over 6 days, 19 hours, and 34 minutes. The heatmap highlights areas of high user interaction with bright colors (red, orange, yellow) and overlays. The navigation menu includes WORK, SERVICES, BLOG, ABOUT, and CONTACT. A call-to-action button says "What's your greatest obstacle?". A "CREATE A NEW SNAPSHOT" button is visible in the bottom right corner.

DesignHammer Home Page URL <https://designhammer.com/>
221 visits 164 clicks 6 days 19 hours 34 mins

Compare Mobile vs Desktop Filter Snapshots Export

WORK SERVICES BLOG ABOUT CONTACT

What's your greatest obstacle?

CREATE A NEW SNAPSHOT

Crazy Egg

The screenshot shows a Crazy Egg report for the DesignHammer Home Page. The top navigation bar includes standard browser controls, a search bar with 'crazyegg.com', and a tab labeled 'Crazy Egg - DesignHammer Home Page - Report'. Below this is a header with a green 'RETURN TO DASHBOARD' button, the URL 'https://designhammer.com/', and statistics: '221 visits 164 clicks 6 days 19 hours 34 mins'. To the right are buttons for 'Compare Mobile vs Desktop', 'Filter', 'Snapshots', and 'Export'. A toolbar below the header offers options like 'HEATMAP' (selected), 'SCROLLMAP', 'CONFETTI', 'OVERLAY', and 'LIST'. The main content area displays the DesignHammer homepage with a yellow-to-white gradient overlay representing visitor heatmaps. The heatmap scale on the right ranges from 0% (dark blue) to 100% (dark red). Key elements on the page include the DesignHammer logo ('designHAMMER BUILDING SMARTER WEBSITES'), a navigation menu with links to WORK, SERVICES, BLOG, ABOUT, and CONTACT, and a central text block: 'WE EMPOWER CLIENTS BY BUILDING SMARTER WEBSITES' followed by '14 years of helping people overcome obstacles through Drupal, WordPress and custom CMS'. A call-to-action button at the bottom left says 'What is your greatest obstacle?'. In the bottom right corner, there's a camera icon and a button labeled 'CREATE A NEW SNAPSHOT'.

Crazy Egg

Screenshot of the Crazy Egg interface showing a report for the DesignHammer Home Page.

DesignHammer Home Page URL https://designhammer.com/
221 visits 164 clicks 6 days 19 hours 34 mins

Compare Mobile vs Desktop Filter Snapshots Export

REFERRER REPORT

Referrer	Amount
designhammer.com	119
google.com	17
facebook.com	12
google.co.in	3
durhamlivingwage.org	2
trianglecreative.directory	2
webperformance.com	2
bing.com	1
carolinatheatre.org	1
google.ie	1
facebook.com	1
linkedin.com	1
raleighrescue.org	1
yellowpages.com	1

Total 164

POWER CLIENTS BY BUILDING SMARTER WEBSITES
14 years of helping people overcome obstacles through Drupal, WordPress and custom CMS

What's your greatest obstacle?

CREATE A NEW SNAPSHOT

The screenshot shows a detailed analysis of the DesignHammer Home Page. On the left, a sidebar displays a 'Referrer' report with a list of websites and their contribution to the total 164 clicks. The main area features a heatmap of the website's layout, with red dots indicating high click density. Below the heatmap, a survey asks 'What's your greatest obstacle?' with a placeholder for an answer. At the bottom right, there's a button to 'CREATE A NEW SNAPSHOT'.

Crazy Egg

The screenshot shows a web browser window with the URL crazyegg.com in the address bar. The title bar reads "Crazy Egg - DesignHammer Home Page - Report". The main content area displays the DesignHammer website (<https://designhammer.com/>). The page has a dark background with white text. At the top left is the DesignHammer logo: a white 3D cube icon above the text "DESIGNHAMMER" and "BUILDING SMARTER WEBSITES". To the right are menu items: WORK, SERVICES, BLOG, ABOUT, and CONTACT, each with a small red or green circular icon. A search bar is located at the top right. The central part of the page features the text "WE EMPOWER CLIENTS BY BUILDING SMARTER WEBSITES" and "14 years of helping people overcome obstacles through Drupal, WordPress and custom CMS". Below this is a large green button with the text "What is your greatest obstacle?". A yellow "CREATE A NEW SNAPSHOT" button is at the bottom right. The top of the browser window shows standard OS X controls (minimize, maximize, close) and a toolbar with icons for refresh, search, and other functions. The Crazy Egg interface includes various analysis tools like "HEATMAP", "SCROLLMAP", "CONFETTI", "OVERLAY", and "LIST" along the top.

Crazy Egg

Screenshot of the Crazy Egg interface showing a heatmap analysis of the DesignHammer Home Page.

The screenshot shows the Crazy Egg interface with the URL crazyegg.com in the address bar. The main title is "Crazy Egg - DesignHammer Home Page - Report".

Key statistics displayed:

- DesignHammer Home Page URL: <https://designhammer.com/>
- Visits: 221
- Clicks: 164
- Duration: 6 days 19 hours 34 mins

Tool options at the top include: Compare Mobile vs Desktop, Filter, Snapshots, Export, Heatmap, Scrollmap, Confetti, Overlay, and List.

The main content area displays a heatmap overlay on the DesignHammer website. A table provides detailed click data:

ELEMENT	TYPE	CLICKS	PERCENT		
				VISIBLE ON THIS PAGE	NOT VISIBLE
Work	Link	22	13.7%		
We empower clients by building smarter websites	Text	13	8.1%		
Contact	Link	13	8.1%		
Blog	Link	12	7.5%		
Services	Link	12	7.5%		
What is your greatest obstacle?	Link	8	5.0%		
About	Link	7	4.3%		
Solving multiple business problems through Drupal	Link	5	3.1%		
designhammer.com/sites/default/files/home-cts	Image	5	3.1%		
Web Development	Link	5	3.1%		
What is your greatest obstacle?	Layout	5	3.1%		
See more of our work	Link	4	2.5%		
Using Drupal to Cut Turnaround Time	Link	4	2.5%		
Mobile	Link	4	2.5%		
Web Design	Link	4	2.5%		
Enter the terms you wish to search for.	Form	4	2.5%		
Contact Us	Link	3	1.9%		
designhammer.com/sites/default/files/dmfb-cor	Image	3	1.9%		
And much more	Link	3	1.9%		
14 years of helping people overcome obstacles th	Text	3	1.9%		
0	Text	2	1.2%		

Buttons at the bottom right include: ABOUT, CONTACT, CREATE A NEW SNAPSHOT, and a camera icon.

Crazy Egg

The screenshot shows the Crazy Egg interface for analyzing the DesignHammer website. At the top, there's a navigation bar with standard browser controls, a lock icon for https://crazyegg.com, and a search bar. Below that is a specific report title: "Crazy Egg - DesignHammer Home Page - Report". The main content area displays two side-by-side heatmaps. On the left, a "Phone" heatmap covers July 15-22, 2015, with 8 days, 3 visits, and 0 clicks. On the right, a "Desktop + Tablet" heatmap covers the same period with 8 days, 218 visits, and 164 clicks. Both heatmaps show user interaction patterns on the DesignHammer homepage, with a prominent heatmap overlay on the desktop version highlighting areas of high user engagement. A green button at the bottom right of the heatmaps says "CREATE A NEW SNAPSHOT". Above the heatmaps, there are several filter and export options: "Use One View for All Data", "Filter", "Snapshots", and "Export". A message at the top encourages creating a mobile-specific snapshot. The overall interface is clean and professional, designed to help web developers and marketers analyze user behavior on their websites.

Optimal Sort

Likes:

- Easy to set up.
- Can use for remote testing.

Be Aware:

- Normalizing data requires assumptions.
- Not cheap if you need the full version.

Optimal Sort

The screenshot shows a web-based application titled "OptimalSort by Optimal Workshop". The URL in the browser is designhammer.optimalworkshop.com. The main interface has a sidebar on the left with various categories: WordPress, Mobile, Drupal Give, Drupal Salesforce Integration, Community, Contact Us, Web Design, Awards, Usability, Drupal, Sustainability, Hosting & Maintenance, eCommerce, and Jobs. On the right, there are sections for "Service" (with "Blog" listed) and "Work". A central modal window titled "Instructions" contains the following text:

Take a look at the list of items on the left. We'd like you to sort those items into groups that make sense to you.

Use the groups provided or create your own by dragging and dropping an item from the left into the space on the right.

There is no right or wrong answer. Just do what comes naturally. When you're done click "Finished" at the top right.

At the bottom right of the modal is a green "OK" button.

Optimal Sort

The screenshot shows a web browser window with the URL designhammer.optimalworkshop.com. The page title is "Optimalsort by Optimal Workshop". The main content area displays a navigation menu for "OptimalSort" with various sections and sub-sections. The "Contact Us" section is currently highlighted. The menu items include:

- Community
- Usability
- Sustainability
- Hosting & Maintenance
- eCommerce
- Jobs
- Hire Us
- SEO
- Our Teams
- Services
 - Drupal
 - Drupal Salesforce Integration
 - WordPress
 - Web Development
 - Mobile
 - Web Design
- Contact
 - Contact Us
- About
 - Drupal Give
 - Awards
- Blog
- Work

At the top right of the page, there are links for "View instructions", "Leave a comment", and a green "Finished" button.

Optimal Sort

This OptimalSort card sort study was launched on 22 July 2015 and is still active.

The latest response was received on 22 July 2015.

5 people have participated and 3 (60%) of those people sorted all 18 cards into an average of 7 groups.

Participants
3 completed + 2 abandoned

Time Taken



A horizontal box plot showing the distribution of time taken. The x-axis ranges from 0 to 1 minute. The median is at 0.72 mins, indicated by a vertical line inside the box. The box spans from approximately 0.70 to 0.95 minutes. Whiskers extend from the box to 0.00 and 1.00 minutes. A small number '1' is located near the 0.72 mark.

0.72 mins

0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

This [box plot](#) illustrates the time taken (in minutes) for participants to complete your survey.
Outliers greater than four standard deviations from the mean have been removed for the purposes of these calculations.

Lowest observed time:	0.70
Lower Quartile:	0.70
Median:	0.72
Upper Quartile:	0.95
Highest observed time:	0.95

?

Optimal Sort

The screenshot shows a web browser window for 'accounts.optimalworkshop.com' titled 'DesignHammer | Optimal Workshop'. The main content is a 'Similarity Matrix' for 'Contact Us' cards. The matrix is a grid where rows and columns represent different card types. The cells contain numerical values (e.g., 100, 33, 66) representing the percentage of agreement for each pairing. A legend at the top indicates that darker shades of blue represent higher values. A 'Contact Us' card is highlighted in blue. A question mark icon in the bottom right corner provides help or information.

	Contact Us	Hire Us	Jobs	Awards	Sustainability	Our Teams	Community	Web Design	Web Development	Mobile	SEO	Usability	eCommerce	Hosting & Maintenance	Drupal	WordPress	Drupal Salesforce Integration	Drupal Give
Contact Us	100	33	33	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0
Hire Us	33	100	33	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0
Jobs	33	33	100	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Awards	0	0	0	33	100	33	0	0	0	0	0	0	0	0	0	0	0	0
Sustainability	0	0	0	33	33	100	33	0	0	0	0	0	0	0	0	0	0	0
Our Teams	0	0	0	33	66	66	66	100	33	0	0	0	0	0	0	0	0	0
Community	0	0	0	0	33	33	33	33	33	100	33	0	0	0	0	0	0	0
Web Design	0	0	0	0	0	0	0	0	33	100	33	0	0	0	0	0	0	0
Web Development	0	0	0	0	0	0	0	0	33	33	100	33	0	0	0	0	0	0
Mobile	0	0	0	0	0	0	0	0	66	66	66	66	100	33	0	0	0	0
SEO	0	0	0	0	0	0	0	0	66	66	66	66	100	100	33	0	0	0
Usability	0	0	0	0	0	0	0	0	66	66	66	66	100	100	100	100	33	0
eCommerce	0	0	0	0	0	0	0	0	66	66	66	66	100	100	100	100	100	33
Hosting & Maintenance	0	0	0	0	0	0	0	0	66	66	66	66	100	100	100	100	100	100
Drupal	0	0	0	0	0	0	0	0	66	66	66	66	66	66	66	66	66	66
WordPress	0	0	0	0	0	0	0	0	33	33	33	33	33	33	33	33	33	33
Drupal Salesforce Integration	0	0	0	0	0	0	0	0	33	33	33	33	33	33	33	33	33	33
Drupal Give	0	0	0	0	0	0	0	0	33	33	33	33	0	0	0	0	0	33

Optimal Sort

Screenshot of a web browser window showing a dendrogram analysis tool. The URL is accounts.optimalworkshop.com.

Dendograms

A dendrogram can be used to illustrate data clusters. The two dendograms below use different cluster analysis methods. [Learn More](#)

The scores tell you "X% of participants agree with this grouping"

Actual Agreement Method

The Actual Agreement Method works best with 30 or more participants and will depict only absolutely factual relationships. We call this the Skeptical Dendrogram.

The dendrogram displays the hierarchical clustering of various topics. The x-axis represents the percentage of agreement, ranging from 100% on the left to 0% on the right. The y-axis lists the topics. The clustering shows that most topics form a single large cluster at approximately 10% agreement, with some smaller clusters branching off earlier.

Topic	Approximate Clustering Level (%)
Community	100%
Drupal Give	100%
Contact Us	100%
Hire Us	100%
Jobs	100%
Our Teams	~85%
Awards	~85%
Sustainability	~85%
WordPress	~85%
Drupal Salesforce Integration	~85%
Drupal	~75%
Web Design	~75%
Web Development	~75%
Mobile	~75%
SEO	~75%
Usability	~75%
eCommerce	~75%

Optimal Sort

The screenshot shows the Optimal Workshop software interface. At the top, there's a navigation bar with tabs for Overview, Analysis (which is selected), Downloads, and Sharing. Below the tabs are sub-navigation buttons for Participants, Cards, Categories, Standardization Grid, Similarity Matrix, Dendograms, and PCA. The PCA tab is currently active.

In the main content area, there's a section titled "Participant Centric Analysis" with a sub-section header "Similar IAs: 2/3". It says "6 groups submitted by stephen@pashby.net". Below this, there are three cards representing different groupings:

- Contact**
Similar group labels:
 - Contact Us
 - Hire Us
- Services**
Similar group labels:
 - WordPress
 - Drupal
 - Web Design
 - Web Development

Each card has a "Contact" button at the bottom right. The "Services" card also has a question mark icon in the bottom right corner.

At the top of the page, there's a status bar with browser icons and the URL "accounts.optimalworkshop.com". The title bar says "DesignHammer | Optimal Workshop".

Treejack

Likes:

- Easy to set up.
- Can use for remote testing.

Be Aware:

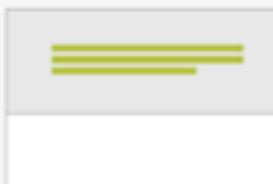
- Not cheap if you need the full version.

Treejack

A screenshot of a web browser window displaying the 'Instructions' page for 'Treejack by Optimal Workshop'. The browser interface includes standard Mac OS X window controls (red, yellow, green buttons) and a toolbar with icons for search, refresh, and tabs. The address bar shows the URL 'designhammer.optimalworkshop.com' and the title 'Instructions | Treejack by Optimal Workshop'. The main content area contains the following text and diagrams:

Instructions

Here's how it works:

 You will be asked to find a certain item and presented with a list of links.

 Click through the list until you arrive at one that you think helps you complete the task.

 If you take a wrong turn, you can go back by clicking one of the links above.

*Please don't use the back button on your browser.
This is not a test of your ability, there are no right or wrong answers.*

That's it, let's get started!

Treejack

The screenshot shows a web browser window with the following details:

- Address Bar:** designhammer.optimalworkshop.com
- Title Bar:** Treejack by Optimal Workshop
- Content Area:**
 - Section Header:** Task 1 of 2
 - Text:** You are a marketing director of a major nonprofit. You are looking to integrate your Salesforce instance with your Drupal website. Where would you find DesignHammer's capabilities?
 - Link:** [Skip this task](#)
- Sidebar:** A vertical navigation menu titled "Home" with a dropdown arrow next to "Services". The "Services" dropdown is expanded, showing the following list items:
 - Drupal
 - WordPress
 - Web Design
 - Wed Development
 - Mobile
 - Drupal Salesforce Integration
 - SEO
 - Usability
 - eCommerce
 - Hosting & Maintenance
- Bottom Bar:** A thin grey bar containing the text "Run script "void(0)"

Treejack

accounts.optimalworkshop.com
DesignHammer | Optimal Workshop

Task by Task Statistics

This page shows a breakdown of success, directness, time taken, and an overall score calculated for each of your tasks. [How are these calculated?](#)

1. You are a marketing director of a major nonprofit. You are looking to integrate your Salesforce instance with your Drupal website. Where would you find DesignHammer's capabilities?

Services > Drupal Salesforce Integration

5 OVERALL



Category	Direct	Indirect	Total	Success %	Fail %
Success	2	0	2	50%	50%
Fail	2	0	2	50%	50%
Skip	0	0	0	0%	0%

Success: 50% (Green bar at 50)
Directness: 100% (Green bar at 100)
Time Taken: 2.06 sec (Bar at 2.06)

?

Treejack

This page shows which branches were clicked first for each task, and what percentage of participants did so. Compare the percentage of first clicks on a branch with the total percentage of participants who visited that branch at any point during the task.

1. You are a marketing director of a major nonprofit. You are looking to integrate your Salesforce instance with your Drupal website. Where would you find DesignHammer's capabilities?

LABEL	VISITED FIRST	VISITED DURING
Work	0%	0%
Services	50%	50%
Blog	50%	50%
About	0%	0%
Contact	0%	0%

2. You are a business owner. You would like to contact DesignHammer about redesigning your website. Where would you do that?

LABEL	VISITED FIRST	VISITED DURING
Work	0%	
Services	25%	25%

Treejack

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DesignHammer | Optimal Workshop

Participant Destinations

This is a breakdown of where your participants ended up for each task.

Legend:

- Correct (Green)
- Incorrect (< 10% of responses) (Light Gray)
- Incorrect (10% - 20% of responses) (Orange)
- Incorrect (> 20% of responses) (Dark Red)

	1	2
Work		
Services		
Drupal		1
WordPress		
Web Design		
Wed Development		
Mobile		
Drupal Salesforce Integration	2	
SEO		
Usability		
eCommerce		
Hosting & Maintenance		
Blog		2
About		
Contact		3

?

Chalkmark

Likes:

- Easy to set up.
- Can use for remote testing.

Be Aware:

- Only single response per question.
- Not cheap if you need the full version.

Chalkmark

You are an agency director. You would like to receive a quote for a new Drupal project.
Where would you click for that?

5 clicks 0 skips 3.5 secs

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DesignHammer | Optimal Workshop

WORK SERVICES BLOG ABOUT CONTACT

WE EMPOWER CLIENTS BY BUILDING SMARTER WEBSITES

What is your greatest obstacle? 40%

Chalkmark

This Chalkmark first click study was launched on 22 July 2015 and is still active.

The latest response was received on 22 July 2015.

9 people have participated and 5 (55%) of those people completed all 3 tasks

Participants

5 completed + 4 abandoned

Time Taken



0.38 mins

This [box plot](#) illustrates the time taken (in minutes) for participants to complete your survey.
Outliers greater than four standard deviations from the mean have been removed for the purposes of these calculations.

Lowest observed time:	0.22
Lower Quartile:	0.28
Median:	0.38
Upper Quartile:	0.51
Highest observed time:	0.57

[?](#)

Chalkmark

The screenshot shows a web browser window for accounts.optimalworkshop.com, specifically the DesignHammer | Optimal Workshop section. The top navigation bar includes tabs for Overview, Analysis (which is selected), Downloads, and Sharing. Below this, there are links for Participants and Clickmaps, along with a search bar and a refresh button.

The main content area is titled "Your Participants". A sub-instruction states: "This table lists all of the participants that started your survey. Incomplete responses are marked as 'Abandoned'. Use this table to segment your data, filter responses and reload your results."

Below this is a detailed table of participant data:

<input type="checkbox"/>	PARTICIPANT	IDENTIFIER	TIME TAKEN	QUESTIONS	TASKS COMPLETED	TASKS SKIPPED	INCLUDE	
<input type="checkbox"/>	1	stephen@designhammer.com	00:00:23		100%	0%	<input checked="" type="checkbox"/>	✓
<input type="checkbox"/>	2	stephen@pashby.org	00:00:13		100%	0%	<input checked="" type="checkbox"/>	✓
<input type="checkbox"/>	3	stephen@pashby.org	00:00:34		100%	0%	<input checked="" type="checkbox"/>	✓
<input type="checkbox"/>	4	david@designhammer.com	00:00:21		100%	0%	<input checked="" type="checkbox"/>	✓
<input type="checkbox"/>	5	stephen@example.com	00:00:27		100%	0%	<input checked="" type="checkbox"/>	✓
<input type="checkbox"/>	6	stephen@pashby.org	Abandoned		0%	0%	<input type="checkbox"/>	✗

A circular callout bubble with a question mark is positioned over the last row of the table.

Chalkmark

The screenshot shows a web browser window for accounts.optimalworkshop.com. The title bar reads "DesignHammer | Optimal Workshop". The navigation bar includes links for "Optimal Workshop", "Treejack", "OptimalSort", "Chalkmark" (which is highlighted), and "Reframer". A user profile for "David Minton" is also visible. The main content area is titled "DesignHammer" with a "Edit" button. Below it, tabs for "Overview", "Analysis", "Downloads" (which is selected), and "Sharing" are shown. A large green header bar in the content area says "Downloads". Below this, a sub-header "Heatmaps (.pdf)" is followed by the text: "This pdf table contains the heatmaps for each tasks for this survey." with download buttons for "Uncut" and "Filtered". Another sub-header "Participant Data (.xlsx)" is followed by the text: "This spreadsheet contains the raw data collected about your participants." with download buttons for "Uncut" and "Filtered". A third sub-header "Raw Data (.xlsx)" is followed by the text: "This spreadsheet contains all of the raw data collected for this survey." with download buttons for "Uncut" and "Filtered". In the bottom right corner of the content area, there is a question mark icon inside a speech bubble.

accounts.optimalworkshop.com

DesignHammer | Optimal Workshop

Optimal Workshop Treejack OptimalSort Chalkmark Reframer David Minton

DesignHammer Edit

Overview Analysis Downloads Sharing

Downloads

To perform fine-grained analysis, you may want to download the raw data for your entire survey and manipulate it in a spreadsheet or some other tool.

Heatmaps (.pdf)
This pdf table contains the heatmaps for each tasks for this survey.

Uncut Filtered

Participant Data (.xlsx)
This spreadsheet contains the raw data collected about your participants.

Uncut Filtered

Raw Data (.xlsx)
This spreadsheet contains all of the raw data collected for this survey.

Uncut Filtered

Silverback

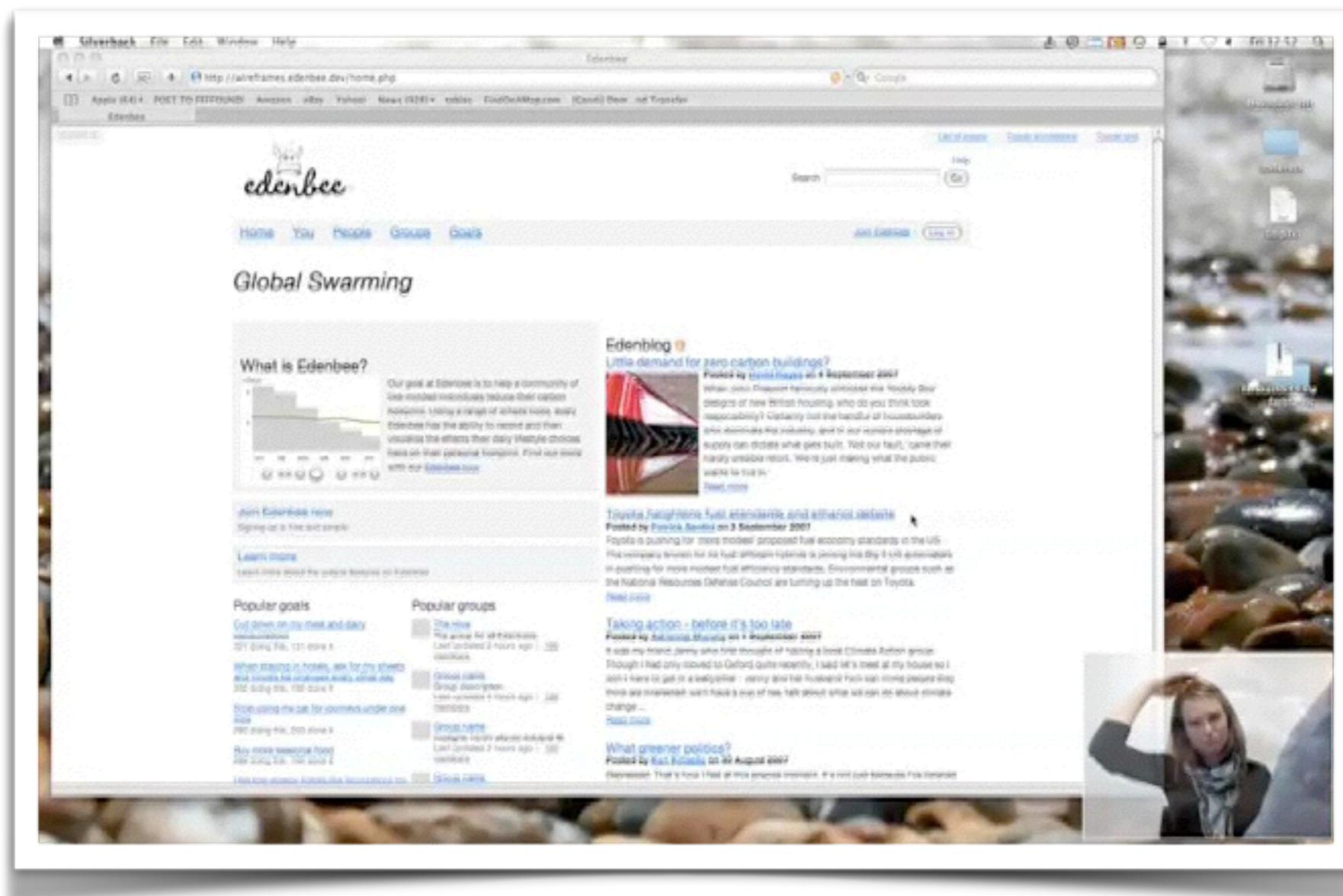
Likes:

- Portable, works well on a standard laptop.
- Does not require a dedicated usability lab.

Be Aware:

- Mac only.
- For on location testing.

Silverback





Conclusion

Conclusion

- No silver bullet to make sites usable.
- Usability is a never-ending process.
- Making sites more usable is fun for all!

Special thanks





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