



The User Is Always Right (Usually)

4 Research Methods That Get Results

by Michael Hartman, Sandstorm Design®

A little about Sandstorm®

- Chicago-based UX and digital marketing agency
- Drupal development shop
- 1500+ in depth interviews and usability studies
- Industry Expertise
 - Healthcare
 - Financial Services
 - Associations
 - Technology
 - Manufacturing



What we'll cover



In Depth
User Interviews



Card Sorting
& Tree Testing



Usability
Studies



Heuristic
Analysis



In Depth User Interviews

Why Conduct In Depth User Interviews

- Uncover user goals and use cases
- Content requirements
- Functional requirements

What to Expect from In Depth Interviews?

- User stories and requirements
- Personas
- Allocate budget to most beneficial functionality
- Identify opportunities to meet previously unknown needs
- Align organization goals with user goals

When Conduct In Depth User Interviews?

- First step in design process
- Anytime is better than never
- If you haven't spoken with your users yet, do it now

How to Conduct In Depth User Interviews

1. Identify research goals
2. Identify your user groups
3. Write protocol
4. Recruit and schedule
5. Conduct interviews
6. Analyze results, user stories, requirements, personas

Tips for In Depth User Interviews

1. Ask a mix of open-ended questions, behavior based questions and quantified questions
2. Allow space for follow up and probing
3. Be flexible yet consistent

Case Study: Health Care

Peter

2/3

"I want a doctor who runs the show. Who looks further and does their due diligence to offer me the best care possible."

"Don't make me wait and then rush me out the door."



When it comes to Peter's personal health, he considers himself to be in pretty good shape. He eats right, is fairly active, and doesn't smoke. As a result of this, health care is something Peter just doesn't really think about right now. He knows it will be a concern soon, but for now, it's not a primary worry in his day-to-day life.

On average, Peter goes to the doctor once a year for his annual check up. He has a general care practitioner through the hospital he was born at, and likes him because he offers high quality service and knows how to ask the right probing questions to identify a problem.

Insured through Blue Cross and Blue Shield, Peter is pretty confident that if he needed to be treated for something, he would be taken care of. If he were to look for a doctor, he would search through his hospital's web site as opposed to the Blue Cross site.

Peter trusts personal recommendations, hospital reputation, accolades and experience when it comes to a specialized need. But for everyday check ups and tests, location and convenience are the top priorities.

While health care is not a top priority for Peter, he is a big believer in preventative maintenance. He will sporadically look up how to avoid a common ailment or identify if there is a problem he hears about in a conversation or on the news. He likes doing his own research and will likely go to a couple sources before making a decision or trusting an answer.



Card Sorting & Tree Testing

Why Do Card Sorting and Tree Testing

Build a user centered site structure and navigation

- Create a new navigation system and menu structure
- Test an existing navigation system and menu structure
- Identify user-centric labels for your navigation and content

When to Conduct Card Sorting or Tree Testing

- At the beginning of the design process
- Anytime you realize your current navigation sucks

How to Conduct Card Sorting

- Identify / catalog your content
- Choose sample of content for testing
- Conduct the study – online or in-person
- Analyze results and build your new navigation

How to Conduct Tree Testing

- Build a sample menu structure of your site (the tree)
- Ask your users “where would you go to find X?”
- Adjust you menu structure accordingly

Tips for Card Sorting and Tree Testing

- At least 16-20 users
- The online tools are worth the cost
- Test users not stakeholders

Case Study: Neurosurgery

Membership Application																																							
95																				International Membership Application																			
90	90																			Pay XYZ Dues																			
75	75	85																		XYZ ByLaws																			
75	75	80	90																	XYZ Mission Statement																			
55	55	50	50	50																Volunteer Opportunities																			
25	25	20	20	20	45															Physicians United for Patients Campaign																			
10	10	15	15	15	30	75														Neurosurgery and Healthcare Reform																			
20	20	25	25	25	25	65	75													Legislative Affairs																			
35	35	40	50	50	25	15	25	25												Conflict of Interest Disclosures																			
10	10	15	20	20	5	15	25	25	50											Guidelines on Neurosurgeon-Industry Conflicts of Interest																			
30	30	35	30	30	10	10	10	15	20	45										ABC/XYZ Guideline Committee																			
0	0	0	0	0	0	0	0	0	0	35	50									Guidelines for the Management of Adult Severe Traumatic Brain Injury																			
0	0	0	0	0	0	0	0	0	0	35	45	80								Guidelines for the Management of Acute Cervical Spine and Spinal Cord Injuries																			
0	0	0	0	0	0	0	0	0	0	35	45	80	95							Guideline for the Surgical Management of Cervical Degenerative Disease																			
0	0	0	0	0	0	0	0	0	0	35	45	80	90	90						Spine Guidelines																			
5	5	5	5	5	10	5	5	5	5	5	5	25	20	20	25					Case of the Month																			
5	5	5	5	5	5	5	5	5	5	5	5	25	20	20	25	85				Webinar Library																			
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5	5	5	5	5	10	5	5	5	5	5	0	15	15	15	15	80	70	55		Medical Image Database																			
5	5	5	5	5	10	5	5	5	5	5	0	15	15	15	15	70	65	55	70	SANS																			
5	5	5	5	5	10	5	5	5	5	5	0	15	15	15	15	50	45	35	50	50	Neurosurgery Journals																		
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5	5	5	5	5	5	5	5	5	5	5	0	10	10	10	10	30	35	25	30	30	60	65	Abstract Archives																
10	10	15	15	15	5	5	10	15	10	10	0	0	0	0	0	10	10	5	10	10	10	10	40	Annual Meeting Agenda															
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10	10	15	15	15	5	5	10	15	10	10	0	0	0	0	0	15	15	10	15	15	15	15	40	90	85	Annual Meeting Archives													
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10	10	10	10	10	10	5	0	0	0	0	5	5	20	20	20	5	10	10	5	10	5	10	15	15	15	10	10	35	Spine and Peripheral Nerves Section										
5	5	5	5	5	5	5	0	0	0	0	0	10	10	10	10	20	25	40	15	20	20	25	25	15	10	10	15	15	55	Link to Tumor Section website									
15	15	15	15	15	20	5	5	5	15	5	0	10	10	10	10	50	40	25	45	40	25	20	20	10	10	10	5	10	5	My CME Credits									
15	15	15	15	15	20	5	5	5	15	5	0	10	10	10	10	50	40	25	45	40	25	20	20	10	10	10	5	10	5	95	CME Information								
55	55	55	45	45	35	20	10	10	30	15	20	0	0	0	0	5	5	0	5	5	5	5	5	5	5	5	5	0	10	5	20	20	Find a Neurosurgeon						
25	25	25	25	25	20	10	5	10	10	5	0	0	0	0	0	5	10	0	5	10	5	5	5	5	5	5	5	0	15	0	15	15	35	Fellowship Directory					
20	20	20	15	15	15	10	5	5	10	5	0	0	0	0	0	5	5	0	5	10	5	5	5	5	5	5	5	0	10	0	5	5	25	75	XYZ Sponsored Fellowship Awards				
5	5	5	5	5	10	5	5	5	5	5	0	0	0	0	0	10	5	0	10	15	10	5	5	5	5	5	5	0	5	0	10	10	15	65	70	Open Residency Positions			
5	5	5	5	5	10	5	10	10	10	10	5	0	0	0	0	10	5	0	10	15	10	5	5	5	5	5	5	0	5	0	10	10	15	65	70	95	Residency Programs		
5	5	10	10	10	10	5	10	10	10	10	5	0	0	0	0	10	5	0	10	15	10	5	5	10	10	10	0	5	0	10	10	10	60	65	90	90	Resident Awards and Grants		
15	15	20	20	20	10	5	10	15	15	10	10	5	5	5	5	15	15	10	25	15	40	40	25	25	30	25	30	15	5	5	20	20	10	5	10	5	5	10	Congress Quarterly Winter 2010

Case Study: Neurosurgery

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0	0	0	0	0	0	0	0	0	0	0	25	20	20	25	70	80					Management of Complex Meningiomas Webinar										
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10	10	15	15	15	5	5	10	15	10	10	10	10	10	10	0	0	0	0	0	0	40	Annual Meeting Archives									
10	10	15	15	15	5	5	10	15	10	10	10	10	10	10	5	5	5	5	10	10	35	2013 XYZ Annual Meeting									
0	0	0	0	0	0	0	0	0	0	0	15	15	15	15	0	0	0	0	0	0	25	2014 Annual Meeting of the ABC/XYZ Section on Disorders of the Spine and Peripheral Nerves									
10	10	10	10	10	10	5	0	0	0	0	5	5	20	20	20	5	10	10	5	10	15	Spine and Peripheral Nerves Section									
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5	5	10	10	10	10	5	10	10	10	5	0	0	0	0	10	5	0	10	15	10	5	Resident Awards and Grants									
15	15	20	20	20	10	5	10	15	15	10	10	5	5	5	15	15	10	25	15	40	40	Congress Quarterly Winter 2010									

guidelines

education

meetings

careers and training

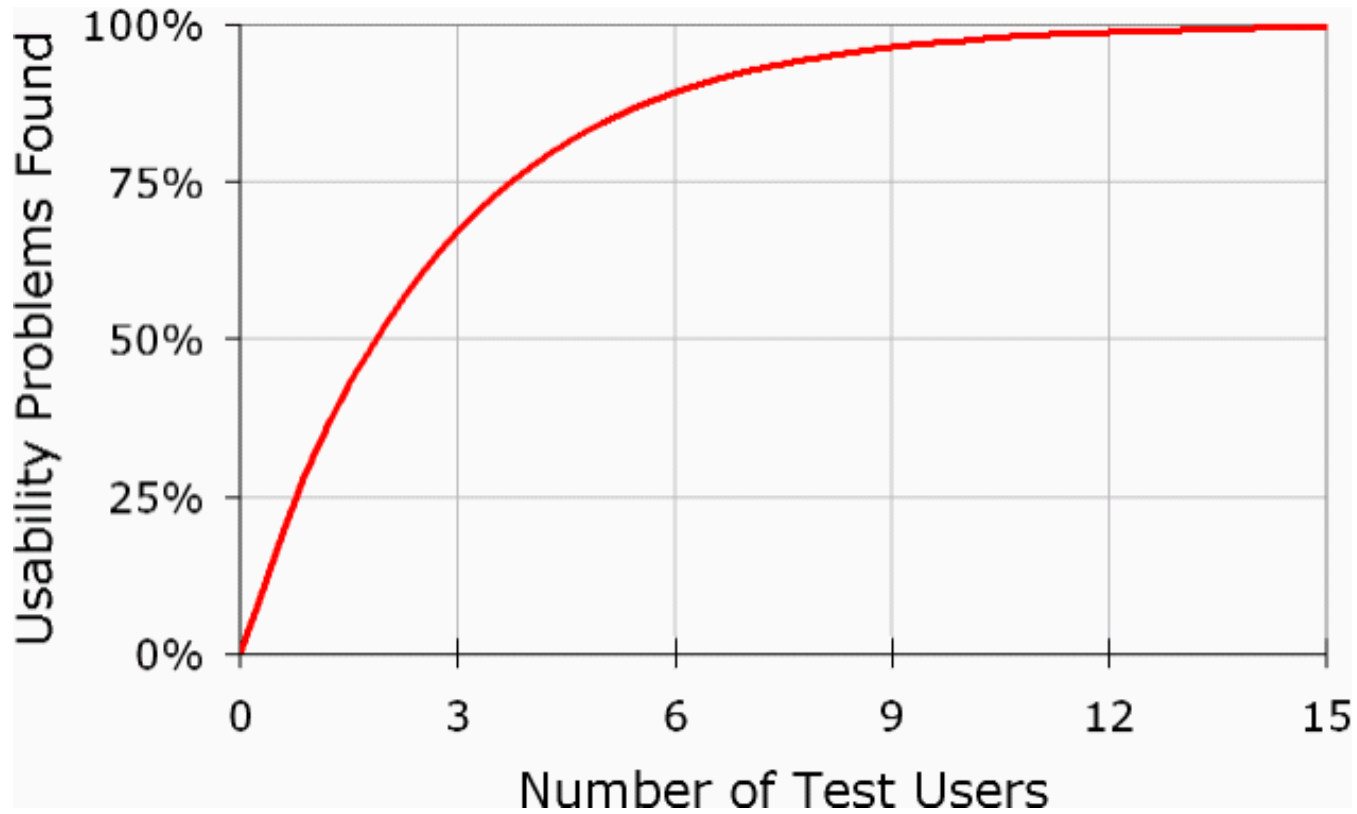


Usability Studies

Why Conduct Usability Testing

- Add user context to your QA process
- Test forms and processes
- Test mobile and touch devices

5 – 6 Users Per User Group



Reference: <http://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/>

What to Expect from Usability Testing

- Identify confusing or unclear language and navigation labels
- Identify confusing or broken processes
- Identify inconsistencies between multi-device versions of your site (mobile, tablet, desktop)
- Identify issues with the “findability” of content

When to Test in the Design Process?

- Early and often is the best practice...but definitely before launch
- Informal usability testing with your team
- Test wireframes and prototypes
- A/B testing on user interface concepts

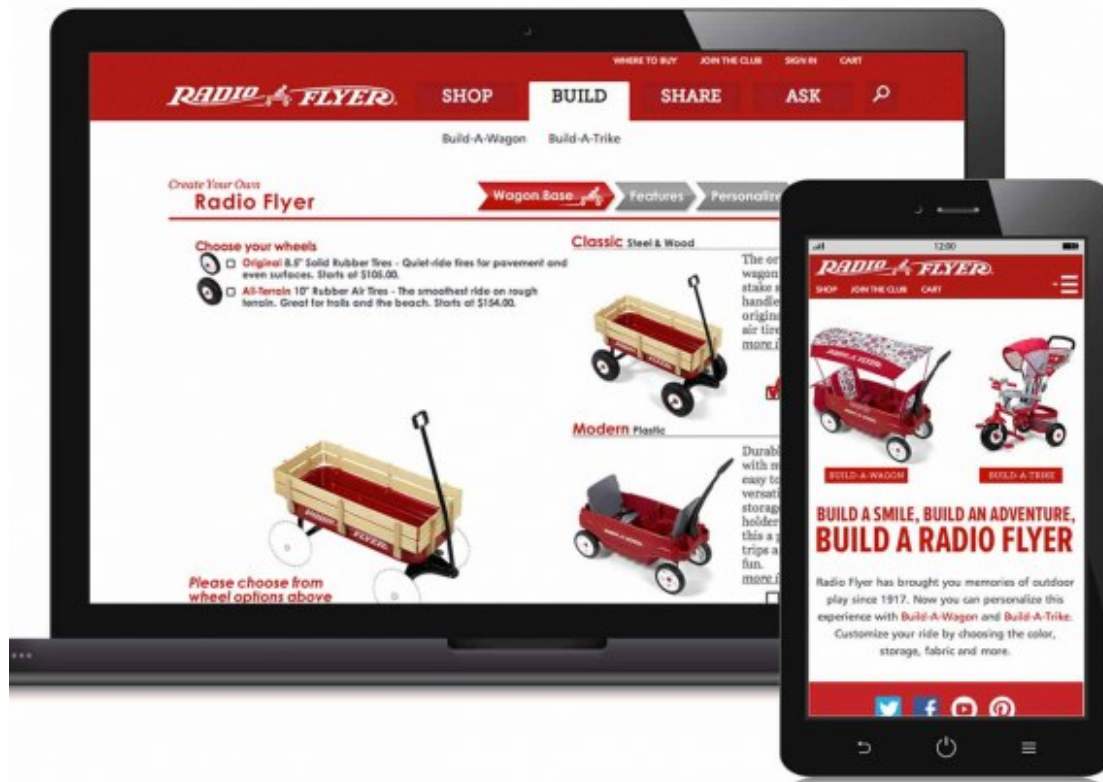
How to Conduct Usability Testing

- Identify the goal of your study and key tasks
- Identify your users and participant criteria
- Write test protocol
- Recruit users
- Conduct study
- Analyze results and make improvements

Tips for Usability Testing

- Focus on conversion points
- Think aloud protocol
- Record if possible
- Allow room for follow up questions and clarifications
- Don't interfere; observe
- Test mobile, touch and desktop experiences
- Involve users not stakeholders

Case Study: Radio Flyer





Heuristic Analysis

Heuristic Analysis

- A checklist of heuristics with pass / fail / needs improvement scoring
- Reasonable substitute for a usability study when it's not possible to recruit users
- Check for 508 compliance

What to Expect from a Heuristic Analysis

- Identify usability issues when testing with real users is not possible
- Checks for site structure, 508 compliance, SEO best practices, etc
- Benchmark your site against recognized usability standards

When to Conduct a Heuristic Analysis

- When you don't have time or budget for a usability study
- When your site needs to meet certain compliance standards (508 or WCAG 2.0)

How to Conduct a Heuristic Analysis

- Define heuristics, several good lists available online
- Conduct analysis, when practical have multiple people review the site
- Follow your list of heuristics
- Analyze results and make improvements

Tips for Conducting a Heuristic Analysis

- Several good checklists available online

Case Study: Bermuda Monetary Authority

The screenshot displays the website for the Bermuda Monetary Authority (BMA). At the top right, there is a "Contact Us" link. A dark blue navigation bar contains the following menu items: HOME, ABOUT US, COMPANY MATTERS, AML/ATF, BANKING, INSURANCE, INVESTMENT, TRUST, and FEES & PENALTIES. Below the navigation bar, the breadcrumb "BMA > HOME" is visible. On the left side, the BMA logo is accompanied by a list of links: STATISTICS, LEGISLATION, DOCUMENT CENTRE, PUBLICATIONS, AIFMD, SOLVENCY II, MARKET Q&A, CAREERS AT BMA, NOTES & COINS, CONSUMER EDUCATION PROGRAMME, and REGULATOR TO REGULATOR REQUESTS. Below this list is a "SIGN UP FOR OUR E-ALERTS SERVICE" button with an email icon and a "CLICK HERE TO SUBSCRIBE" link. The main content area features a carousel with a slide titled "BMA House" showing a modern building. To the right of the carousel are three promotional boxes: "EXCHANGE YOUR OLD BANK NOTES", "e-BMA click here to login", and "AML/ATF Registration for Non-Licensed Persons". Below the carousel is a text block titled "BERMUDA MONETARY AUTHORITY" with a detailed description of the BMA's role and functions. At the bottom right, there is a video player titled "BMA Careers: Is This You?" showing a woman speaking.

A pair of black-rimmed glasses with clear lenses is positioned in the foreground, resting on a stack of books. The background is filled with more books, their spines and pages creating a sense of depth and focus on the glasses. The lighting is soft, highlighting the texture of the book covers and the smooth surface of the glasses.

Interpretation & Analysis

Questions?

Presented by:

Michael Hartman

Director of Technology & Usability

Sandstorm®

773.348.4200

mhartman@sandstormdesign.com

