
Usability Secrets Revealed

Testing Techniques to Improve
User Experience and Increase ROI

Presented by Larry Marine
Intuitive Design Group

Secret #1: You're Wrong

- OK, that's a bit dramatic, but...
- Everything you think you know about the user is probably wrong
- The users aren't who you think they are
- They do things differently than you think
- They have different reasons for needing your product than you think

What is Usability Testing

- Just one step in the UCD process
- Tool to identify what works and what doesn't
- Objective measure of how well your product design supports the user's way of thinking and working
 - How well does your design support the user tasks that are important to your objectives

Usability Testing is NOT...

- Good for getting user demographics
- Statistically significant data
 - Too small of a sample size (3-6 users)
 - Which way is the wind blowing
- A sanity check just before launch
 - You won't have time to fix anything major
- A way to justify a design concept

Secret #2: Test for a Reason

- Avoid testing just to see how user-friendly something is
- Users need to complete tasks
- You need to make money
- Make sure the design supports both, well

- Usability Testing is part of a larger process
 - Its not something you can do well by itself

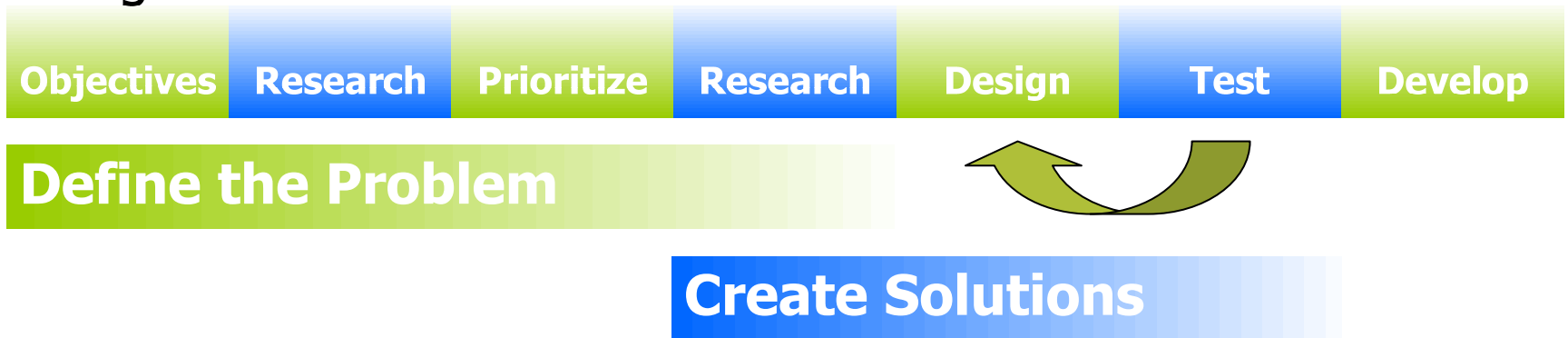
The UX Design Method

- Determine the Objectives
- Define the target users and their tasks
- Prioritize the tasks to the objectives
- Refine your user and tasks definitions
- Design to the users and tasks
- TEST!
- Refine the design.
- Iterate until objectives are met, then build

The Design & Test Process

- Define the problem, then the solution
- Design the product to fit the business
 - Everything ties back to the objectives
 - Less emotional, more data-driven decisions

Integrated Process



Determine the Objectives

- Business Objectives
 - Simple - Make more money or reduce costs
- Marketing Objectives
 - Increase market share
 - Attract new users
 - Source users from the competitors
 - Deepen existing relationships
 - Open a new market

Objectives/User Matrix

		Business Objectives	
		Increase Revenues	Reduce Costs
Marketing Objectives	Deepen Relationships	Existing Users	Existing Users
	Source Customers	Competitor Users	N/A
	Open New Markets	New Users	N/A

Objectives

- Focus on one key objective
- Be flexible
 - User research and testing ALWAYS points to new and better objectives
- Set observable and measurable metrics
 - These form the basis of your design and user testing goals
 - E.g. 20% of users should purchase within 3 visits

Define the Target Users

- Conduct observational user research to define your user roles
 - Avoid surveys and interviews
 - What users say and do are more different than you will ever imagine
- Define their roles and tasks
 - Look for key steps and seducible moments
- This forms the basis of your test tasks

Prioritize

- What users and tasks mean the most to your business and marketing objectives
- What is technically feasible
- Be ready to change your objectives
 - Every project has found new and bigger opportunities
- Design and test to these priorities
- Avoid doing the wrong things well

Example Priority Matrix

Function/Task	User Experience	Business	Tech. Feasibility	Overall
Researcher	1	1		2
Find previous authors/users	2	1	2	10
Become aware of files, reports, artifacts	1	1	3	10
Determine relevancy of information	1	1	3	10
Collect artifacts in project "folder"	3	2	1	12
Contact relevant experts/authors	2	3	1	12
Search shared drives	1	2	1	8
Search local hard-drives	1	2	3	12
Search multiple intranets (cross firewalls)	1	2	3	12
Search email folders	1	2	1	8
Search the internet	1	2	1	8
Search pay sites and groups	2	3	2	14
Search hard copy libraries	2	3	1	12
Share useful artifacts with others	2	1	2	10
Keep some content private	2	3	1	12
Share some content locally (group/dept)	3	2	1	12
Compile selected data	2	1	1	8
Create working docs	3	1	1	10
Pass reports on to reviewers	3	3	2	16
Attend to Reviewer markups	3	3	1	14
Track revisions/versions	3	1	1	10
Search Across Org Boundaries	1	1	3	10

Design

- Design to the prioritized users and tasks
- Don't be afraid to come up with competing design approaches
- When in doubt, mark something for testing
 - Determine if you can test it now, or later
 - Can you test it with paper prototypes?
 - Does it require a working mock-up?
- Test the general design approach
 - Not the design, specifically

Test!

- Know what you are testing
 - Items marked for testing in design
 - Key, high priority tasks (not features)
- Know when the design is good enough
 - Rely on your metrics
- Know who to test
 - Based on your user research

Secret #3: Test Early & Often

- You don't need a working prototype
 - They take time and money to create
 - Often too far along to make major changes to
 - They do give you rich feedback
- You can test with paper mock-ups
 - They are easy to create
 - Users know they are mock-ups
 - But don't give rich UX info

How to Test

- Base the success metrics and test goals on the business objectives
- Create test scenarios that test key, high priority user tasks, not features
- Invite typical users for the key tasks
- Prepare the prototype to complete the tasks
- Run the tests
- Refine and retest until the design meets the objectives

Test Objectives

- Based on the initial design objectives
- Determine how the task in question relates to the main objective
 - Main Objective: increase conversion rates to 20%
 - User Research Data suggests 25% of users are motivated to register
 - Task Objective: 80% of typical motivated users should be able to complete the registration process without error or giving up

The Test Tasks

- Test specific user tasks
 - Not features or whole sites
- Create task problems for the user to solve
 - Give them realistic questions to answer
 - Not instructions to follow
 - Questions create intrinsic, real-world like motivation
- Let them struggle
 - Don't tell the user what to do
 - Watch how they try to recover

Secret #4: Make It Realistic

- Base the test tasks on real world situations
- Keep the tasks simple
- Prep the users consistently
 - Have them read a story to set context
 - Expose them all to the same marketing message
 - Try to get everyone to the same knowledge basis
- Give the users all the task info they will need
 - Fake credit card #, fake login, etc.

Example Task Question

- What is the price to print 20 copies of **ACME SALES BROCHURE** and 15 copies of the uploaded file **ACME ACCOUNT BRIEF**?

Invite the Users

- Must fit your user profile for the tasks
- Market Research firms can help find users
 - But you have to clearly define what the right user is and create accurate screeners
- You only need about a half dozen or so
 - Don't fall into analysis paralysis
 - You won't get any better data past 5 or 6 users

Objectives/User Matrix

		Business Objectives	
		Increase Revenues	Reduce Costs
Marketing Objectives	Deepen Relationships	Existing Users	Existing Users
	Source Customers	Competitor Users	N/A
	Open New Markets	New Users	N/A

Prepare the Prototype

- Make sure you have all the screens you need for the tasks you are testing
 - You don't need a full working prototype
 - If the user gets off track, you just need a screen saying "Sorry, this function is unavailable. Try something else."
- Be prepared to make changes on the fly
 - Have resources ready to fix obvious problems

Run the Tests

- Pilot the test with the first user
 - Make changes to the prototype (not the design) or the task scenarios
- Run a few tests, make changes
- Give a day between tests to give time to change the UI Design and prototype
- Refine and retest until the design meets the objectives

Seeing is Believing

- Invite various stakeholders as observers
- Put up a schedule and ask folks to sign up
- Avoid generalizing on a sample set of 1
 - Ask folks to watch more than one test
- If they are in the room with the user, they must make absolutely NO noise
 - No coughing, snickering, or holding their breath

Secret #5: No Lab? No Worries

- You don't need a formal lab
- A quiet room will do for informal tests
 - No more than 2-3 of you in the room
 - Use cameras for remote viewing, if necessary
- You don't always need to tape the tests
 - Unless you want to make a highlight video
- You don't need a formal report, either

Ultimate Results

- The design supports the users tasks that impact your business objectives
- A product that is very different from what you thought it should be BEFORE testing
- The most successful product you can provide, given all of the constraints
- A clear, defensible competitive advantage
- Increased opportunity for market dominance

Typical ROI & NPV

- Typical test costs from \$10K-\$50K
- At least a 100:1 benefit ratio
- Avoids wasting time and money on unwanted or unnecessary features
- Avoids PR and support nightmares
- Establishes brand differentiation

Secret #6: No Time to Test?

- You don't always have to run a test
- Try an expert review, first
 - Finds 50%-80% of the same problems in half the time and cost
 - Can identify what should be tested
- Still based on your objectives, the user roles, and their tasks

Suggested Reading & Info

- Practical Guide to Usability Testing
 - Reddish and Dumas
- Handbook of Usability Testing
 - Jeff Rubin
- Free Expert Evaluation by Larry Marine
 - Free 1 hour evaluation of your site
 - (719) 488-4566
 - Larry@IntuitiveDesign.com

Please provide your business & marketing objectives, who your target users are, and what task(s) you want accomplished.