



Do-It-Yourself Usability Testing

So, if you have followed all of our Usability articles, outlining how to create useful content, layout, and navigation, then you may feel your website is set and ready and usable. WRONG! Well, it may be usable, but how do you know for sure? Many top companies spend thousands of dollars to design their websites and then never even actually look at them themselves to see how usable they are.

You can test your website to see if it is working in a real-world situation. You know your website backwards and forwards; after all, you designed it. But your customers don't, and it is your customers' perception of your website that makes you your profits, so you will really want to know what their experience is like.

Users who aren't happy with your site will usually just leave, and they won't take the time to fill out your feedback form to say "Yo, that drop-down menu thingy is too hard to use" or "Hey, when I fill out my phone number, I want to be able to include the dashes like I am used to". They'll just go someplace else. How do you know what you need to make your site better? Through usability testing.

Usability testing can be as grand and expensive as hiring a special task-force team to pick apart every detail of your site, or it can be as easy as inviting a few friends over to a spare room at the office and having them perform a few tasks and rating your site. If your company can afford it, it is perfectly acceptable to go the more expensive route. But if you don't want to spend a lot of time and money, usability testing can be done in two days for a few thousand dollars or less. The cheapest, most low-tech form of usability testing is to have your 70 year old mother and your ten year old son perform the same tasks on your website. Even if neither is in your target demographic you at least know that almost anyone can get through your site ok, with a modicum of understanding. If they give it the thumbs up, you are probably good to go.

BUT you probably want some more detailed results, so if you do encounter problems, you can know what to change or what to fix.

Do I really need usability testing?

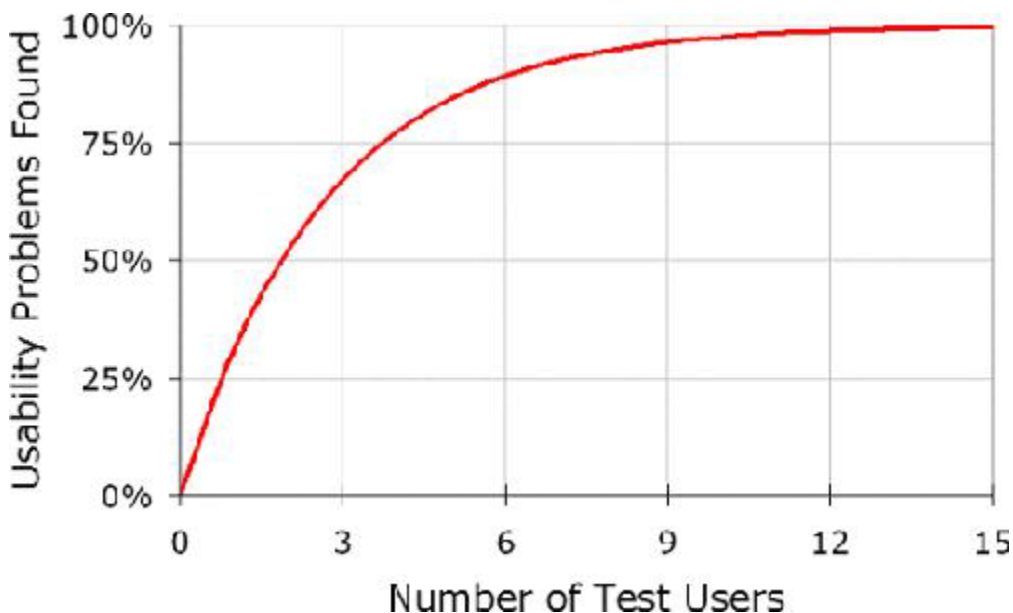
You spent a great deal of time and money building your website, and the whole purpose is for your customers to use your website, so it would be a good idea to make sure your customers can actually do what they visit your site to do, be it shop for strollers, find cheap flights, or learn about giraffes.

What sort of test should it be?

Usability testing can range from the very complex to the very basic. All you really need is a spare room, a few computers, some observers, some test subjects, and some video equipment. You can have a few subjects come in, friends, family, or coworkers, just so long as they are in your target demographic. Have them perform a few simple, common tasks on your site, such as making a hotel reservation, purchasing a green size L sweater, or finding out what time a certain store closes. Observe how they do it- we suggest videotape so they don't feel you breathing down their necks. After their tasks have been completed, evaluate them on their experience, and find out if they have any feedback about what was difficult and what was hard.

How many subjects should there be?

Jakob Nielsen of Alertbox insists that you only need 5 users to conduct reliable usability testing. In March of 2000, he and Tom Landauer conducted a test to determine the number of usability problems found during testing. The graph of his results after testing 15 users is as follows:



According to his results, your greatest amount of information comes from between one and 6 test subjects, after which you begin to get repeat feedback, wasting time and money by gaining information you have already learned. According to Nielsen, the first 5 subjects tested will discover 80% of usability problems. Nielsen says that the generally accepted number for testing subjects is 15. But he recommends performing 3 smaller rounds of tests rather than blowing your budget on one big test. Run a test with 5, make some adjustments and then run it again with 5 more. Then you can see how you are improving as you go.



How long is this going to take?

A University of Denmark study examined the data of 50 teams who performed usability testing and determined that on average it only takes 39 hours to conduct a proper usability test. And they said even that number was a little padded towards the high end. If you take two days- a few hours to plan the test, a few hours to round up some subjects, an hour to run them through their tasks, a few hours to review the data, and then an hour or two to examine and summarize the results, you can be done in very little time but still have thorough, reliable usability test results.

Who should conduct it?

You should have a crackerjack squad of testers working on this usability examination.

- *At least one person should be trained in usability*, or, at least have read through a couple of books and articles like this one.
- *At least one person should be a web designer* who has been involved with the original design of the website being tested, because he or she knows the components intimately.
- *At least one person should be skilled with audio/visual equipment* if you are using video cameras or audio recorders.

You don't need a huge team of people milling about; two to four people is plenty.

Who should be the test subjects?

Your test subjects should be from your target demographic. If you are aiming at middle-aged men, you need to test middle-aged men. If you are targeting teenage girls, you need to test teenage girls. Test the people who will actually be using your site. If you cannot readily find people in those demographics yourself, there are agencies that can find them for you.

What is it going to cost?

You will need some equipment such as computers (we are sure you have a few of those), a video camera, and maybe some paper to write down data (bet you have that, too). If you outsource for test subjects through an agency, it could run you \$50 to \$100 per person. The total, then, will run you less than a thousand dollars, if you use only 5 tests subjects. If you use family and friends, as long as they are in your target demographic, it won't cost much as all, as long as they are willing to give a few hours of their time.

It will cost you a few hours, as well, but consider the alternative. The article "Mazed and Confused" by Sari Kalin, found in the April 1, 1999 article in CIO Web Business Magazine, Forrester Research Inc. asserts that up to 40% of potential buying customers can be driven away by hard-to-use websites. That is a lot of lost revenue. In that same Kalin article, Jakob Nielsen reports that any sort of investment you make into making your site more user friendly, large or small, can pay off by a factor of "ten or more".



How should it be conducted?

You can create a temporary test lab in your office break room, or you can go all out and create a permanent testing lab complete with heavy-duty monitors and video-audio equipment, even testing rooms with two-way mirrors. Fixed labs like this are a big venture, but if you have a medium to large company and plan on doing a considerable amount of ongoing usability testing as your company grows, it may also be a wise investment.

For a more portable, temporary testing space, you can set up a few computers with a few private cubicles. Tell your subjects that they will be performing a certain number of given tasks within an allotted amount of time (45 minutes to an hour, usually). Set up video cameras and audio recorders or unobtrusive observers to take notes.

Ask yourself these kinds of questions:

- Are we looking for anything in particular, such as issues with the shopping cart, or why people don't click past the 3rd page?
- How long does it take for the user to complete the task?
- Does any one step take longer than others?
- What paths did the user take?
- What paths did the user NOT take?
- Does the user use the back button?
- Does the user use the search option, or click through the navigation bar menu?
- Does the user read the headlines?
- Does the user understand how to fill out any sort of order or registration form?
- How does the user fill out the order or registration form- is it suited to his/her natural habits?
- How long does it take for the user to fill out the forms?

Ask your subjects questions such as:

- Where did your eye first look?
- Did the layout make sense?
- Was everything clear, or were there areas that confused you?
- Did you ever get lost and have to go back?
- Was the registration/order form simple enough?
- Did the navigation make sense?
- Was anything hard to find?
- Was anything hard on the eye, hard to see?
- What do YOU think would make this site easier to use?



What do we do now?

Okay, now you have some real user feedback. Don't just sit on it. If you have learned that your users hate having to choose their state from a drop-down menu and would rather just type it out, make it happen. If your subjects have reported that they cannot tell what a link and what is just plain text, jazz up the links to make them more noticeable. If your users say that they didn't understand how to view the items in their shopping cart as they went along, make it easier. You know the problems, now make the solutions happen. When you make it easier for your customers to use your site, you make it easier for your customers to buy your products or your services, and that raises your profits, making it all worth it.

Since you now know how to do a quick-and-easy round of usability testing, you can re-check every few months to see that your site and any changes you make to it are still working for your users. Remember, as Jakob Nielsen said, any investment in usability testing will come back to you.

Related Articles and Resources:

[Website Usability and You](#)

[Website Usability and Navigation](#)

[Usability Labs: Portable and Fixed](#)

[Why You Only Need to Test With 5 Users](#)

[How Long It Will Take](#)

[You Wont Get The Same Results Each Time](#)

[Mazed and Confused by Sari Kalin](#)

[When to Outsource and How to Compensate](#)

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