

An Introduction to Usability Testing

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Many times when companies design a new product, they overlook the most important component--the user. Donald A Norman, a cognitive psychologist and co-founder of the Nielsen Norman Group, consults companies in order to promote human-centered, user friendly products. He states in his book The Design of Everyday Things that with emerging technology, marketers and engineers are often driven to produce feature laden objects that don't serve practical or even known purposes (Norman xiii). Basic human centered design principles are often ignored; principles that would not only benefit the users, but also save time and money.

Usability refers to the ease with which a user (or consumer) interacts with a product. It is an important facet in our consumer driven, mass-producing society. Instead of marketing ill-conceived or unnecessary items, we would be better served by products featuring human centered design principles. Usability testing is an effective tool in making sure that the user is able to interact with the product in the manner that it was conceived and to confirm the intended goals are being met.

Usability testing can be applied toward many different areas, hardware or software. You may do usability testing on a product as simple as a child's toy. Or you may do it on information appliance such as a cell phone to see if users are able to interact with it in the manner the manufacturer conceived. You may do it on an internet site to determine whether the structure and navigation are conveying the intent of the designer. You can even apply these methods to student projects such as portfolios, where the

importance of relating essential material is crucial. For the purposes of this paper, I will focus on website usability testing, but the principles are applicable to products as well.

As a DTC major, there is an expectation to generate items with public consumption in mind. For example you may have to produce technical documents, online portfolios, websites or even 2D animations in Flash, just to name a few. The purpose of doing usability testing is twofold. First, it will help you to more fully understand how usability is applied in real world situations. Second, in the process of doing usability testing all of you, potential designers, writers or information specialists, will hopefully come to fully understand the concepts behind usability so that your work may be even more accessible and successful in the future.

Pick a subject

To begin you must have a something to evaluate. The best bet would be something that interests you, as you will be devoting a good portion of the semester to this project. The more interactive that thing which you decide to test is, the more likely it is that you will receive valuable feedback. Initially you may want to evaluate a popular website that has been is backed by a large, well known company (e.g., you may want to find if the rest of the world hates navigating through all the extra stuff on Amazon.com as much as you do). But if you consider this project an opportunity to bolster your portfolio, it would be best to think small.

Thinking Small

As a student, there are probably plenty of websites available for you run tests on if you look among your fellow students. Chances are good that there are some DTC majors who are working on functional websites or online portfolios, and most of them would appreciate some useful feedback. Ask around. You could even do some digging on the school's website to see if any of the school affiliated club websites might benefit from a bit of critiquing. The point of thinking small is to increase the possibility of your tests results promoting change.

If you have chosen to do a usability study on a mass marketed product or popular commercial website, people may not be receptive to making changes based on your study. Also, you will most likely not be able to meet with the potential client. Because of those two points, I believe you would be missing out on valuable experience and would seriously discourage you against this. If this is still the route you would like to take, you will of course skip the “contacting” and “getting to know” your clients steps ahead.

Get to know your subject

Simple but true. You must know what you will be testing. Essentially it will be a usability test with you as the participant. What is it? What does it do? Who is it for? Those are some of the basic questions that you will be asking yourself. Identify what you think maybe potential weaknesses and note the strengths. This step is a very important precursor to the next step. Potential clients will be impressed when they think you have invested time in their product or website.

Contact your prospective client

Once you have decided what site(s) you would like to run usability tests on and have familiarized yourself with it/them, it is time to take your first big step in the process: contacting your prospective client. You may feel a little intimidated here, and that's understandable. You are approaching a person who has devoted time and energy to developing a concept and has brought it to fruition. Who are you to tell them that what they've done isn't good enough or should be changed?

Well, chances are most people will welcome some constructive feedback, especially if you have looked among your peers for subject matter. And many people are more than willing to help students who have taken an active interest in their work. If you have completed the previous step and show them you have a good understanding of their product or site, they will appreciate the time you have already put in.

A few things that you should touch on during the conversation are:

1. Introduce yourself and state that you are doing a project for a class.
2. Briefly explain the class and some of the concepts behind usability.
3. Present your proposed project. Let them know that you will present them with a report detailing your findings. At no time should you mention any problems specific to their product or site as that could be construed as an insult.

If they seem interested in participating, consider the hardest part over. Arrange to get together-this will give you an opportunity to get to know one another in a casual environment. Be sure to give yourself at least an hour to discuss things in detail.

Get to know your client

Have your client pick a place. This will increase their comfort level and promote free flowing conversation. Some possibilities are local eateries, coffee shops or even the school cafeteria if they would like.

Meeting your client is your opportunity to go into more detail about the project. Again explain the fundamentals of the class and usability. Let them know what you know about their site and begin to ask questions:

1. Who is their target audience?
2. What do they see as strengths/weaknesses?
3. Would they be willing to make changes based on your results?

Basically your purpose is to get them talking, and most people love to talk about their work with someone who seems interested. Let them go, inserting leading questions here and there so that they touch on the issues that you have, without letting them know what you see as potential problems. DON'T forget to take notes!

Although this step comes next, it would behoove you to have some idea of how you will be conducting the tests so that you can relay this to your client. The exact details of this can be ironed out later.

Determine how you will run your test-location, questions, taping, etc

Now that you have received the official go ahead from your client (unless you have chosen to do a big company) it is time to get started. Since you have gotten to know the site and your client in depth, you should be able to formulate what you think are some key points that you want to focus on in the tests. Make a list of these from your notes.

Be sure to decide ahead of time:

1. Will you just let them go freely without interjections from you?
2. Will you be asking questions?
3. Are you going to give them directed tasks?
4. Will you give them a survey at the end?

It would probably be best to do some sort of combination of these. More on this is included in the “Run your test” section.

Find your participants

Considering also that you only need a few participants to effectively test a site, again, finding a few recruits should not prove to be too difficult. Although it may seem unlikely that only a few people are needed, Nielsen has actually studied the effects of adding more people to the testing and found that it is detrimental to the usability testing process. In fact he has determined the ideal number of people as 5 (useit.com).

Our test subjects were recruited at school. If your potential testers won't work for free, try the lure of free snacks as a reward for their time. But it is likely that students will participate for nothing if you they are familiar with you from other classes. Just make sure that it is someone who will feel comfortable sharing their thoughts with you.

Run your tests

Before the testing begins, take a few minutes to brief the testers on your expectations. As you did with the clients, tell them a little about the class. Let them know you are interested in such things as how easily they navigate through the site, what they think is the focus and primary audience, and their impressions on the overall

appearance. Advise them that they are to think out loud so that you understand what they are thinking and so you can take adequate notes.

Let them navigate the site for a while uninterrupted. When they don't seem to be speaking up enough, ask them what they are doing or thinking. If they seem to stall, have a list of tasks for them to complete. It would be a good idea to focus these tasks on areas that you and your client have identified as problem areas, if they haven't already been touched on. When you are done, either on paper or orally, ask them some specific questions and get their overall impression.

Again, DON'T forget to take notes!

Gather your results

Now comes the tedious part. You've done the fun parts, you feel as though you have accomplished a lot and you're almost done. Pretty much all that's left is compiling the mountains of notes you've taken-you remembered to take notes, right?

There are a couple of things you can do to ease this task. After each step, especially after meetings and tests, be sure to write a summary. These can help you to remember things that weren't in your notes or highlight those things in your notes that you want to remember. Also, they can be included in your final paper.

Another thing that will help you in this process is to work in partners, if allowed. Two note takers are better than one-what one misses the other is likely to catch. Of course later you and your partner will have to figure out how to combine your results into a coherent whole. Breaking down the project into specific tasks that highlight each other's strengths will help you to address who does what and avoid conflicts later.

Submit results to your client

The end is near. All you have left to do is to share your information. Be sure to get some feedback as to whether your document seems professional. Look at other examples to get an idea of what should be included, what kind of format to use and how to tactfully present the criticisms and suggestions. Once it's ready, you can send it to your client.

While usability testing may still seem like a daunting task, about midway through it you will be questioning whether it's just a little too simple to be true and definitely by the end you will be feeling as though you got away with doing a project that was way too easy. And it is easy. All you have to do is get started.

Endnote I must give thanks to my partner, Ted Fordyce, for his help and insight during our joint project. Ours was the beta version of the constantly renumbered Usability and Interface Design (ENGL 492, 410 and one in the middle which I can't remember). It was a learning process for all and so the rules were made up along the way. Big thanks to Helen for her guidance and enthusiasm. Even though I had know idea what she meant by "interface" on day one, by the end of the class I really felt as though I had gained invaluable knowledge that will benefit me in the future.

Works Cited

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Norman, Donald. The Design of Everyday Things. Basic Books. New York: 1988