

User Attitudes and Environmental Factors: A Usability Study of the Opera Web Browser and its Contexts of Use

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Introduction

Information from a usability study on a product can provide beneficial information for a specified group or individual with user problems, ideas for development, and recommendations for the product. Our usability test compares a new option for browsing the web called Opera with the more familiar browsers Internet Explorer (IE) and Netscape. Opera has recently become available in Michigan Technological University's Center for Computer-Assisted Language Instruction (CCLI); our intentions were to invite CCLI users to take the test and record the data straight from the actual environment. We found seven participants.

Dawn Hayden, the director of the CCLI, accepted our proposal to conduct this test; in turn, we promised to provide her with information for further recommendation of the product, in future considerations of CCLI software. The question we want to answer is this: Is Opera initially impressing users as an improvement over existing web browsers? To answer this question, Opera's aspects of initial attraction for new users must be defined. There are three areas where a new browser must succeed in impressing intended users:

- Adaptability of user features
- Accessibility of user option preference
- Navigability of user interface.

Methodology

Imagine you are asked to design your "ideal" web browser that will compete on the big market. True, it is not an easy task. So do you think you could just draw a picture of it? What would your options be? We asked a group of users to do just this exercise during this usability test. Their drawings proved to be valuable tools for data analysis and user participation during the test.

The test started by gathering background information on the amount of internet usage and preferred web browsers of each participant. Then came the drawing exercise. Participants were asked to draw a picture of what their ideal web browser would look like if they were assigned to design one. We then instructed each participant to investigate Opera, and assigned a few tasks to help them get oriented. The tasks included:

- Search for a web page
- Start a new page
- Type in a URL

We encouraged them to roam freely, to push all the buttons, and investigate Opera's options. (The screenshot in fig.1 is actually a registered version with no advertisements and customized icons.)

After letting the participants discover Opera's features, we asked some follow up questions to get the user's point of view. Participants were asked to describe their



Figure 1. A customized registered Opera interface.

impressions of Opera's interface, to compare what they saw to what they had drawn on the transparency, explain any difficulties in using the browser, and to answer why they will or will not use Opera again.

Environment

Testing took place in CCLI as mentioned before. There are roughly fifty computers in daily use by undergraduate students, graduate students and faculty; this assured us that closing the lab for one hour while testing took place on only seven computers was out of the question. We reserved two pods of computers on the PC side. Tests were not run on the Mac side of the lab.

Due to the amount of users in the computer lab, the initial feel before the test was that this environment had potential to be a distraction to the participants. Usability studies are most commonly done in a controlled, distraction-free area. Here, either participant or usability expert may break concentration on the test, talking to a colleague passing through. But Richard (Dickie) Selfe effectively describes the lab when he writes about the CCLI Community: "I always hope that people will leave here and REALLY miss the closeness they've felt in the lab, and try to recreate that feeling wherever they work or live." (http://www.hu.mtu.edu/ccli/comm.htm)

The CCLI is really the epitome of computer technology with its "user-friendly" atmosphere. Participants were at ease during the test, chatting with one another, pointing

out the new features being discovered. Everyone, including the stressed out usability team conducting its first test, was comfortable in their own setting, motivating participants' to learn this new internet browsing option.

Context

To perform a successful test, the usability team must give careful consideration of the intended audience, which in our case is the CCLI's director pro-temp (Dawn Hayden,) the central and western Upper Peninsula of Michigan panel of usability instructors and experts-in-training, along with internet users in general. We set out seeking the answer to the question of whether Opera is initially impressing users as an improvement over existing web browsers. The decision was made that the test must be conducted by interviewing actual users in their environment.

Motivation

There are a few reasons for our own motivation to choose Opera as the focus of our test. One is that it is a new browsing software option on the desktops at the CCLI. Another is Opera's marketing campaign. "The fastest browser on Earth," higher standards of web page display consistency and connection, and less hard drive space to use are all claims begging for tests to prove or disprove. Anytime these tests turn out positive, the data adds more motivation for people to use the product.

After hearing the results of this test, those of you who are not satisfied with current web browsers may become motivated enough to try Opera. It is compatible with many markup languages including xml. As for our participants, initially a promise of pizza and pop was enough motivation. Those who needed an extra push were enlightened on how fun the actual test will be, drawing and web surfing. Drawing on the educational aspects, we also stated the fact that if they were planning on taking the Reading and Usability course, an experience on the participant side of a usability test may serve to gain knowledge when conducting future tests of their own.

Results

As stated before, we had seven participants for this test; the background information data told us that average internet usage was 9 hours a week, 70% use Internet Explorer (IE) as their common browser, and the other 30% said Netscape. This gave us an idea of how experienced each participant is when using web browsers, and this data was compared to their respective browser drawings. We realized that had we stopped the background information at just internet usage and preferred web browser, the drawings would have ended up looking like the preferred browser. But before we had them draw, we also asked the participants to explain what they didn't like about the browser they are used to. This helped the participants get an idea of what they think a browser should look like. As it turned out, most of the drawings were unique in their own way, and more importantly, most (6) did not resemble IE or Netscape.

The method of having the participants draw their ideal web site had its purposes too. For starters, the procedure helped open the mind of the participants to new ideas for browsers. Opening up the mind of the users helped them explore Opera, looking for options that were different and better. The drawing also served as an observation device for the test team. We were able pique participant curiosity for explorative usage of Opera without having to write down the observations as participants explored the software. This type of observation can put participants in an uncomfortable state that would add undue pressure. It also makes written observation for three team members watching seven participants rather difficult. The follow-up questions provided questions that recalled the fifteen minutes of Opera usage.

The first of the follow-up questions asked the participants to describe their impressions of the Opera interface. Although two participants did not like the advertisements on the unregistered (free) version the CCLI presents, they, along with every other participant responded in a positive way. Included in the comments were:

- Faster downloads (2 users)
- A simpler, more basic design (3)
- Nice features (2)

The next question asked each person to compare Opera with their drawing. Four of the seven responded that it was close to their drawing, having features they would look for in a browser. Three participants noticed how customizable Opera is to the individual user. One participant drawing actually turned out to be very close to the Opera interface. Although screenshots are unavailable, one is able to manipulate the browser to look very much like Figure 2. In fact, there are at least two more drawings that Opera can customize to. It is a very versatile interface that gives every user his/her own look, and with the short amount of use our participants had, even they learned of this feature.



Figure 2. An example of a participant's drawing

When asked to explain any difficulties they encountered while using Opera, participants overwhelmingly responded that it was a little disorienting at first. Opera has a different look, and first use can be a little tricky. But there is an air of familiarity: the interface is similar to the Windows operating system, and the "hotlist" has a Windows Explorer look to it, just as the artist of fig. 2 wants in his ideal web browser. But the difficulties that arose are surface value. With a little time, the interface can be intuitive, especially if the user takes the time to customize. More evaluative usability tests may surface bigger problems, but our exercise produced minor bumps in orienting to new software.

To get opinions straight from the user, we asked the question of whether they will use Opera or not and why. Five users responded saying they would use it again, and another said maybe. This data, along with everything else collected provides the answer to our question, we asked at the beginning. That answer: Opera is initially impressing internet users as a new browser option.

Recommendations

Again we'd like to point out the goal of our usability test: - to find the "initial impression" Opera has on users. This was just a surface value test. Our findings indicate to us the recommendation of more usability tests. One expectation for Opera in the CCLI was its possible replacement of Netscape and Eudora, because of Opera's email capabilities. Further tests could be done along that topic.

Since the test took place on the PC side of the CCLI, another similar test could easily be run on the Mac side. Opera's customizing capabilities could also be the topic of a test. There are many topics to explore for Opera's usability.

Two of our participants volunteered comments on dislikes of the advertisements in the unregistered version of Opera. The company that designed the software, Opera Software A/S out of Oslo, Norway, has a version for sale called a registered version (see fig. 1) with no advertisements. We recommend looking into acquisition of a registered version, especially if more tests will be run.

Finally, the evidence provided in this study compels us to recommend that Opera stay on the desktops at the CCLI as a browser option. 85% percent of the participants gave indication that it will be used again, and if a registered version is purchased, it will be 100%. At this point, Opera is not well-known by the CCLI users. Only two of the participants ever heard of it.

True results can only happen if everyone knows about it, and along with the last recommendation comes a suggestion that Opera is somehow "marketed" to the CCLI users. This could be anything from removing Netscape from some of the desktops to just putting text on the icon stating that Opera is a browser option. Media classes can suggest the use of Opera and its options. Topics can be made for assignments in classes investigating its use.

The Opera web browser is a promising option for internet users. It shall be interesting to see if other users outside the CCLI catch on. We the team members have downloaded Opera onto our own computers and use the browser more and more. One participant was observed using Opera many days after the test was conducted, and she never even heard of it before. Apparently it is initially attractive enough to deserve another look.