

Background

To compliment the testing and research done by *Critical* and Patrick Finch in Europe, I conducted a series of tests on Amazon's Mechanical Turk to try out various aspects of the EC's Ballot design. The goal is to determine both how to design the ballot in the most neutral way possible, and for Mozilla to determine the most successful summary and image for the Firefox section of the ballot.

I used MT because it's a very fast and cheap way to get a design in front of many eyes. And the responses that came back were very good; users spent an average of 2.8 minutes on a five-minute test, and gave complete answers to free-form questions. A few drawbacks of the test were:

- Users tended to be more highly-technical than average
- Users tended to have heard of Firefox and already have a favorable opinion about it
- MT did not provide a way to filter results by country, and many users were in North America as a result

Because of the above problems, the MT tests are not the best sample of users that are similar to those seeing the ballot in Europe. However, their answers still provided some insight into why people use what browsers, what factors would make them switch, and what presentations of Firefox's brand and motto would be most compelling.

Setup

The MT tests were given in three phases. In all of these test, various demographics questions such as what browser the user was running and where they live were asked.

Phase One: Banners and Phrases

The first phase consisted of two tests: one in which users compared Firefox banners against other Firefox banners, and another in which they compared Firefox slogans against other Firefox slogans. The goal was to determine which banner was most visually compelling, and what slogan was most persuasive. There was no effort in this to be browser-neutral - the title and description of the test advertised it as a survey to "help Mozilla." Each test had 40 participants.

Phase Two: Top Banners and Top Phrases











The second phase consisted of two tests, similar to the tests in phase one. The difference is that only the top two banners and top two phrases were being compared, according to the results of the first test. This was essentially a second round to determine the final winner in each category. Each test had 100 participants this time.

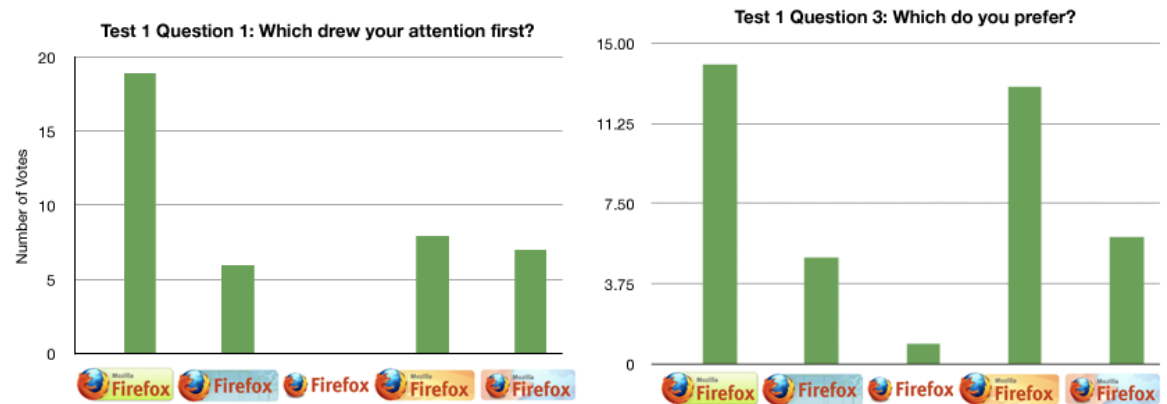
Phase Three: Do Banners or Phrases make a Difference?

In this phase, I ran tests which presented users with a full browser ballot. I gave a separate tests for each banner design, and a separate test for each slogan design: 10 tests in all, each with 40 participants.

Data

Phase One: Comparing Five Banners Against Each Other

Test 1 Question 1: Which drew your attention first?			Test 1 Question 3: Which do you prefer?		
	Frequency	Percentage		Frequency	Percentage
	19	47.5%		14	35.90%
	6	15%		5	12.82%
	0	0%		1	2.56%
	8	20%		13	33.33%
	7	17.50%		6	15.38%

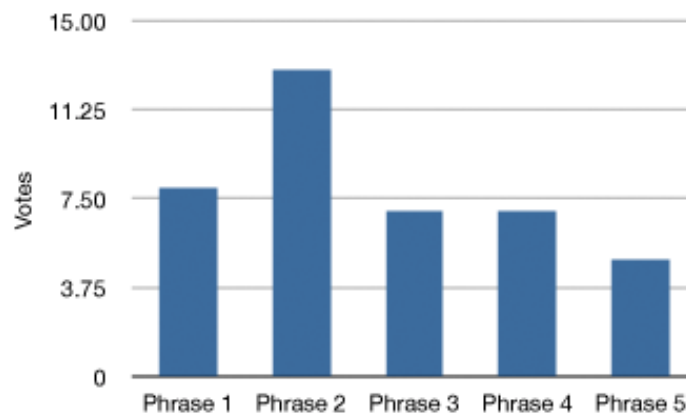


Phase One: Comparing Fives Slogans Against Each Other

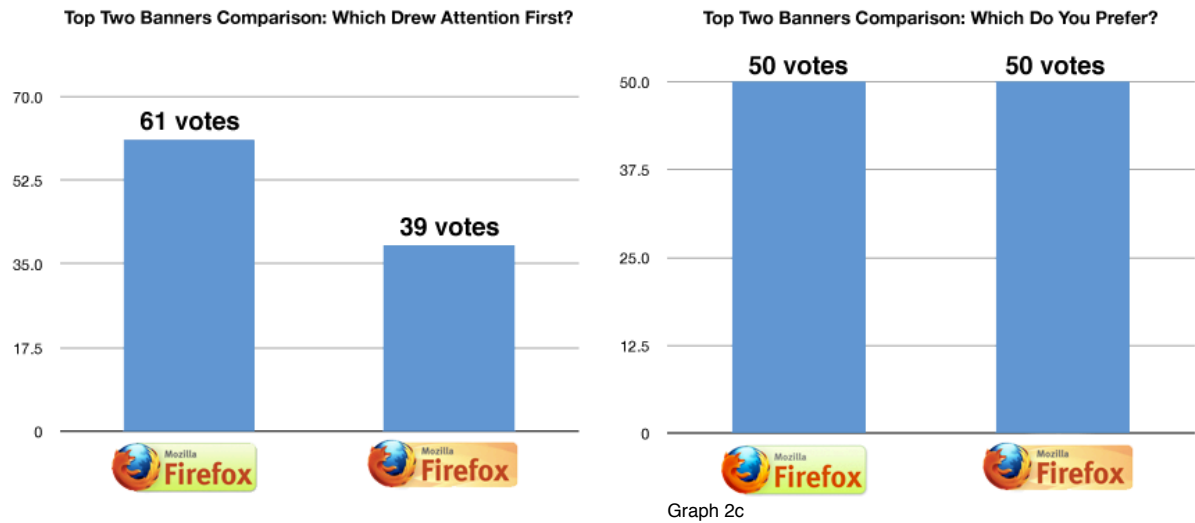
Test 2 Question 1: Which is most convincing?

	Frequency	Percentage
Your online security is Firefox's top priority. It's built by the Mozilla Foundation to make browsing better.	8	20%
Firefox adapts to how you use the Web. Find out why more people have downloaded it than any other browser.	13	32.5%
Firefox is free and made to help you get the most out of the Web. Find out why more people have downloaded it than any other browser.	7	17.5%
More people have downloaded Firefox than any other browser. Find out why!	7	17.5%
Built by the Mozilla Foundation to make the Web better, Firefox won't take over your computer or compromise your privacy.	5	12.50%

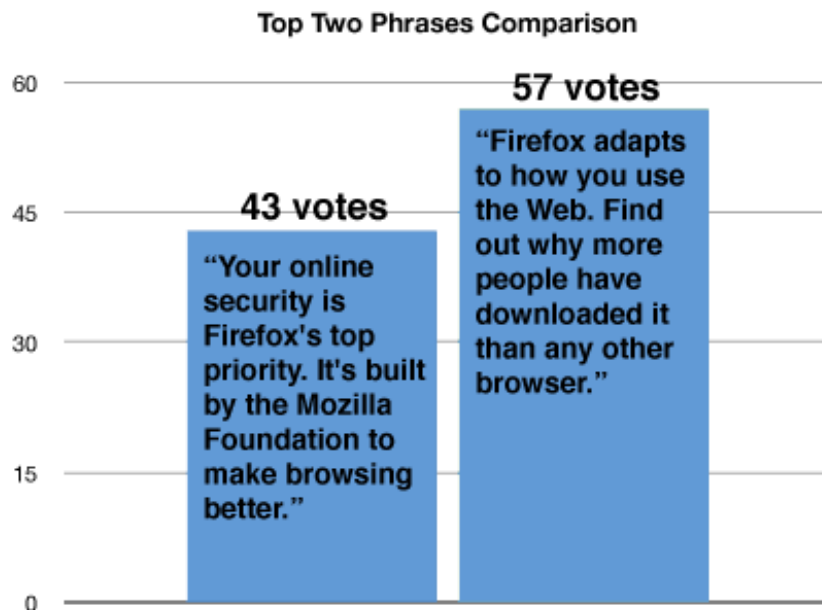
Test 2 Question 1: Which is most convincing?



Phase Two: Top Two Banners Against Each Other



Phase Two: Top Two Slogans Against Each Other



Phase Three: Do Different Banners Make a Difference?

Design 1:



Design 1, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	1	2.5%
Chrome	13	32.5%
Internet Explorer	8	20%
Firefox	14	35%
Opera	4	10%
Choose Later	0	0%

Design 1, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	1	2.56%
Chrome	8	20.51%
Internet Explorer	10	25.64%
Firefox	18	46.15%
Opera	2	5.13%
Other	0	0%

Design 2:



Design 2, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	1	2.5%
Chrome	10	25%
Internet Explorer	8	20%
Firefox	18	45%
Opera	3	7.5%
Choose Later	0	0%

Design 2, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	0	0%
Chrome	9	22.5%
Internet Explorer	10	25%
Firefox	19	47.5%
Opera	2	5%
Other	0	0%

Design 3:



Design 3, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	3	7.5%
Chrome	11	27.5%
Internet Explorer	5	12.5%
Firefox	16	40%
Opera	5	12.5%
Choose Later	0	0%

Design 1, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	1	2.5%
Chrome	10	25%
Internet Explorer	5	12.5%
Firefox	21	52.5%
Opera	3	7.5%
Other	0	0%

Design 4:



Design 4, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	2	5%
Chrome	6	15%
Internet Explorer	7	17.5%
Firefox	22	55%
Opera	3	7.5%
Choose Later	0	0%

Design 1, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	1	2.63%
Chrome	7	18.42%
Internet Explorer	5	13.16%
Firefox	22	57.89%
Opera	3	7.89%
Other	7	0%

Design 5:



Design 5 Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	3	7.5%
Chrome	11	27.5%
Internet Explorer	5	12.5%
Firefox	18	45%
Opera	3	7.5%
Choose Later	0	0%

Design 1, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	1	2.5%
Chrome	11	27.5%
Internet Explorer	6	15%
Firefox	20	50%
Opera	2	5%
Other	7	0%

Phase Three: Do Different Phrases Make a Difference?

Phrase 1:
Security is Firefox's top priority. It's built by the Mozilla Foundation to make browsing better.

Slogan 1, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	0	0%
Chrome	13	32.5%
Internet Explorer	7	17.5%
Firefox	16	40%
Opera	3	7.5%
Choose Later	1	2.5%

Slogan 1, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	0	0%
Chrome	9	23.68%
Internet Explorer	6	15.79
Firefox	22	57.89%
Opera	1	2.63%
Other	0	0%

Phrase 2:
Firefox adapts to how you use the Web. Find out why more people have downloaded it than any other browser.

Slogan 2, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	1	2.5%
Chrome	10	25%
Internet Explorer	7	17.5%
Firefox	18	45%
Opera	3	7.5%
Choose Later	1	2.5%

Slogan 2, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	0	0%
Chrome	9	24.32%
Internet Explorer	4	10.81%
Firefox	21	56.76%
Opera	3	8.11%
Other	0	0%

Phrase 3:
Firefox is free and made to help you get the most out of the Web. Find out why more people have downloaded it than any other browser.

Slogan 3, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	0	0%
Chrome	18	45%
Internet Explorer	4	10%
Firefox	14	35%
Opera	4	10%
Choose Later	0	0%

Slogan 3, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	0	0%
Chrome	14	35%
Internet Explorer	5	12.5%
Firefox	19	47.5%
Opera	2	5%
Other	0	0%

Phrase 4:
More people have downloaded Firefox than any other browser. Find out why!

Slogan 4, Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	1	2.5%
Chrome	16	40%
Internet Explorer	5	12.5%
Firefox	14	35%
Opera	4	10%
Choose Later	0	0%

Slogan 4, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	0	0%
Chrome	10	26.32%
Internet Explorer	9	23.68%
Firefox	16	42.11%
Opera	3	7.89%
Other	0	0%

Phrase 5:
Built by the Mozilla Foundation to make the Web better, Firefox won't take over your computer or compromise your privacy.

Slogan 5 Question 1: Which item on this screen would you choose?

	Frequency	Percentage
Safari	3	7.5%
Chrome	9	22.5%
Internet Explorer	12	30%
Firefox	9	22.5%
Opera	6	15%
Choose Later	1	2.50%

Slogan 5, Question 3: Which browser do you currently use most often?

	Frequency	Percentage
Safari	0	0%
Chrome	9	23.08%
Internet Explorer	12	30.77%
Firefox	14	35.9%
Opera	4	10.26%
Other	0	0%

Phase Three: How did People Respond to the Ballot?

Table 3a: All Results from People Presented a Ballot (Switchers and Non-Switchers)

		Current Browser:					
Ballot Choice:		Chrome	Firefox	Internet Explorer	Opera	Safari	Total
	Chrome	69	29	16	1	0	115
	Firefox	13	134	6	1	1	155
	Internet Explorer	3	15	44	0	0	62
	Opera	3	7	5	23	0	38
	Safari	7	5	0	0	3	15
	Total	95	190	71	25	4	385

Table 3b: Who Would Switch Browsers When Presented a Ballot?

		Switched from:					
Switched to:		Chrome	Firefox	IE	Opera	Safari	Total
	Chrome	0	29	16	1	0	46
	Firefox	13	0	6	1	1	21
	IE	3	15	0	0	0	18
	Opera	3	7	5	0	0	15
	Safari	7	5	0	0	0	12
	Total	26	56	27	2	1	112

Table 3c: Who Would Stick with Their Browser vs. Switch

said they'd stick with:	Chrome	Firefox	Internet Explorer	Opera	Safari
People	69	134	44	23	3
out of:	115	155	62	38	15
as a percentage:	60.00%	86.45%	70.97%	60.53%	20.00%
said they'd change:	40.00%	13.55%	29.03%	39.47%	80.00%

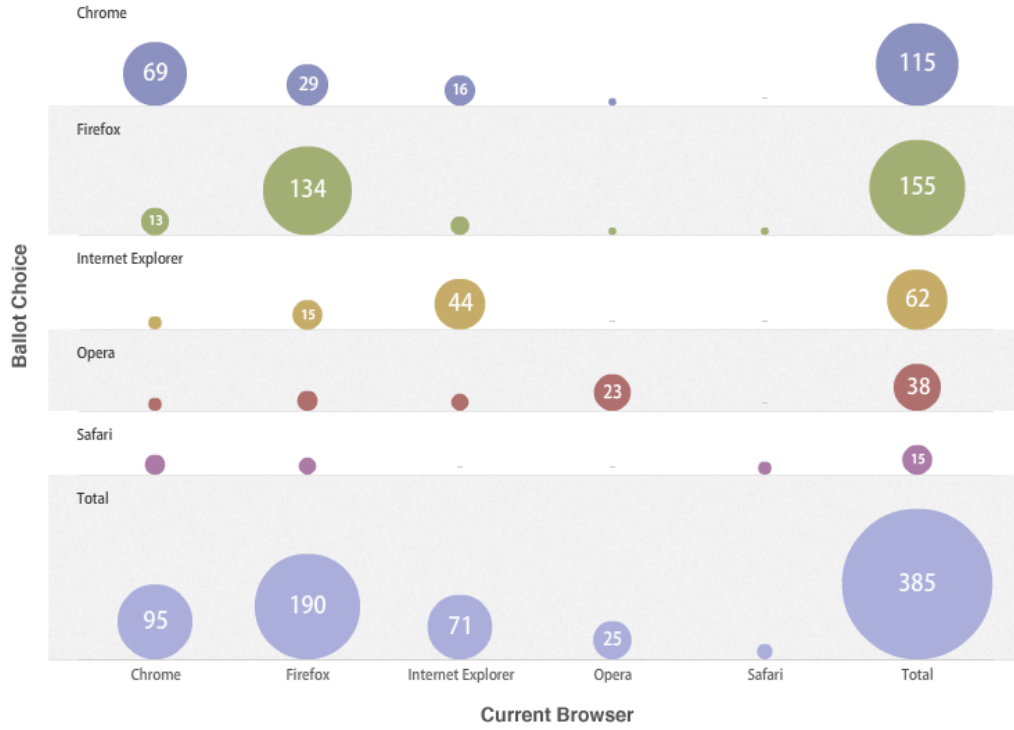
Table 3d: Information about Firefox Users in Sample

Total Firefox users:	190				
headed for:	Chrome	Firefox	Internet Explorer	Opera	Safari
number of people:	29	134	15	7	5
as a percentage	15.26%	70.53%	7.89%	3.68%	2.63%
(of those not sticking with Firefox)	51.79%	-	26.79%	12.50%	8.93%

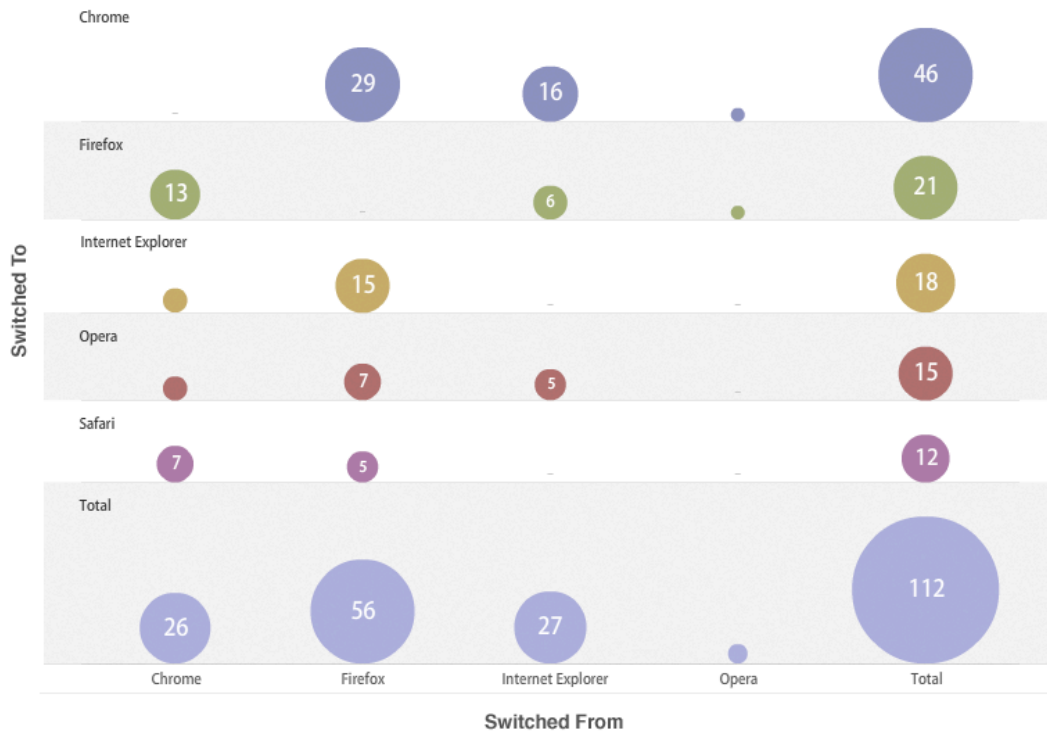
Table 4d: Of the 21 users that wanted to switch to Firefox:

	Chrome	Firefox	Internet Explorer	Opera	Safari
this many came from:	13	(134)	6	1	1
as a percentage:	61.90%	-	28.57%	4.76%	4.76%
Of non-Firefox users, 10.77% of people wanted to switch to Firefox.					

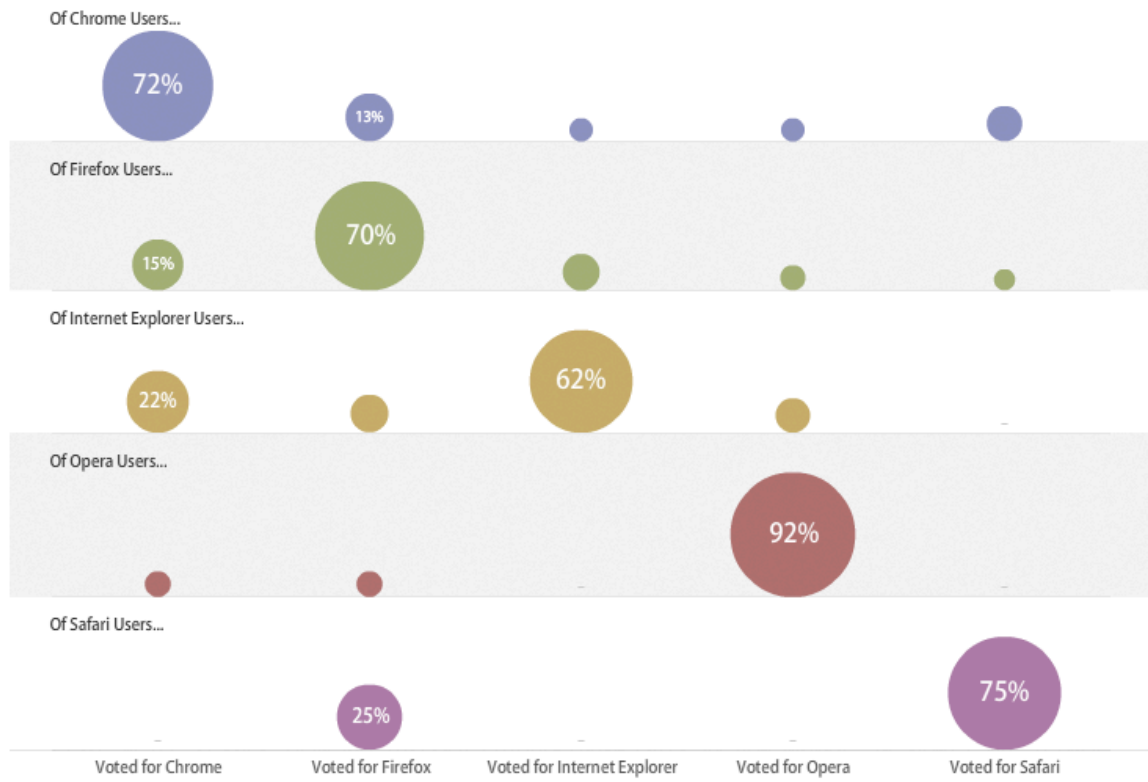
How Individuals Voted When Presented a Ballot



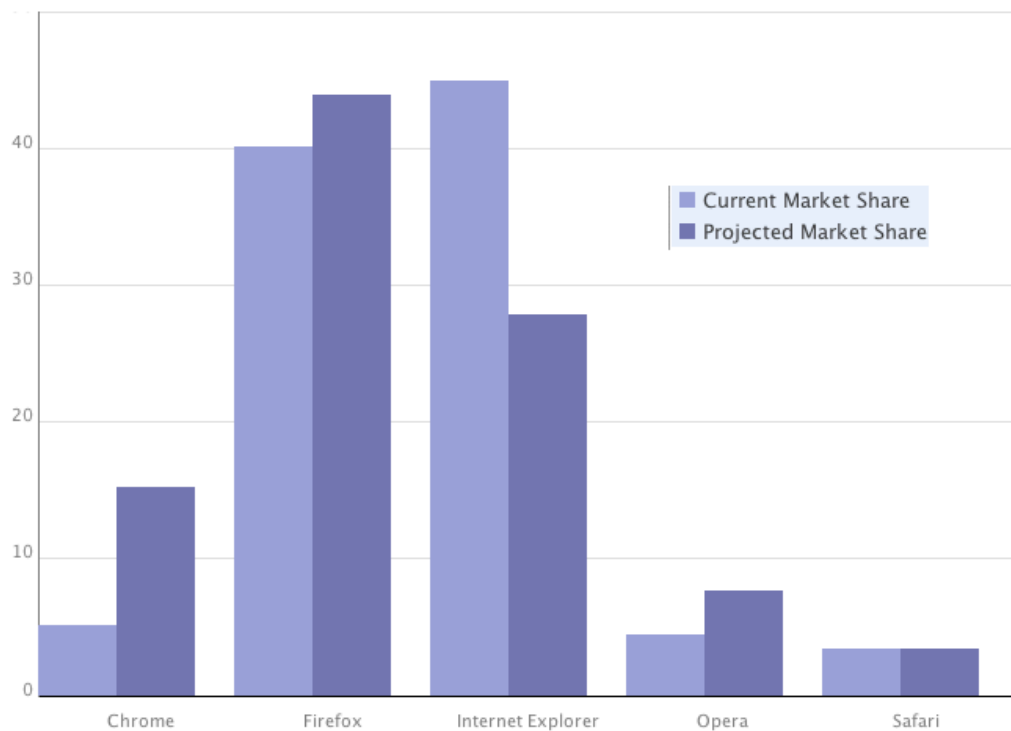
Number of Voters Who Would Switch Browsers When Presented a Ballot



How Participants Responded to Browser Ballot



Projected Market Share Change from Ballot



Conclusions

Banner Tests

In Phase One, users were presented with the different banner designs. When asked which design drew their attention first, nearly half of users chose the design with the green background. This isn't so surprising: it's the brightest and lightest color of the set, and also provides the most stark contrast with the orange color of the logo. When asked which banner they liked best, 35.9% said the green border and 33.33% liked the fire background. This means that 12.5% of users looked first at the green banner, but liked the fire banner more. The users who liked the green background nearly all said it "stood out more," or had greater contrast, and many said they liked the bright or attractive colors. Users who liked the fire background said the fire looked more integrated, or that they warmer colors better. There was no significant difference between the users who were Firefox users already and those who were not.

Phase two compared the two most popular banners against each other, with 100 participants. The green background was again found to draw attention first, with 61% of votes. For the most preferable, this time the results were split 50/50. Most answers why centered on color preference. Internet Explorer users tended to vote for the green background.

My own personal opinion is that the green background is the stronger option. In each test it was found to catch the eye first, which is important in a ballot of unfamiliar items. Also, the green is a compliment of the orange in the Firefox logo, drawing out the relevant brand colors on the ballot.

Recommendation: Of the five designs, the strongest is the Firefox logo with the green background. It outperformed every test for drawing attention first, and won or tied each test for preference. It's also my personal opinion that this is the strongest design graphically and for the Firefox brand.

Slogan Tests

In Phase One, users were asked to pick the phrase which was most convincing. The most people (32.5%) selected the phrase "Firefox adapts to how you use the Web. Find out why more people have downloaded it than any other browser." Those that did were all current Firefox users, and all either valued speed or security most highly in a browser. They chose this phrase because they found it accurate, honest, understandable, or were aware of Firefox 3.5 and thought that it correctly expressed the features of this version. Interestingly, while there were not enough participating Internet Explorer users to be statistically significant, none of them chose this phrase, but rather distributed evenly among the other phrases. Their stated preferences were towards ease of use, knowing their history would "not be recorded," and knowing the browser was free. The second

most popular phrase was "Your online security is Firefox's top priority. It's built by the Mozilla Foundation to make browsing better," with 20% of users.

Phase two compared the two most popular phrases against each other, with 100 participants. Phrase 2 received the majority of votes with 57%. Internet Explorer users were evenly divided between the two phrases.

Recommendation: Of the five phrases, the strongest is "Firefox adapts to how you use the Web. Find out why more people have downloaded it than any other browser." It was preferred in each test, because people found it understandable and honest.

Full Ballot Presentations: Do Changes in Phrases and Banners make a difference?

Showing the full ballots to 400 people revealed various information about what people care about in browsers. Since one detail was changed in each ballot - either the Firefox banner design or banner slogan - I was looking to see if any particular ballot caused a significant number of people to switch to Firefox. The answer to this is no: fewer people actually selected Firefox from the ballot than were using Firefox in every ballot except one. The ones that did switch to Firefox did not mention the banner or talk about what was in the slogan they saw. This reveals that, unsurprisingly, no particular banner design or slogan is a "magic bullet" that gets users - even those unfamiliar with browsers - to switch to Firefox.

So, banners and slogans were not the main thing that would make users switch. Of the 400 users in the study, 21 non-Firefox users said they would switch to Firefox when presented the ballot. **Of the people who said they'd switch to Firefox, over half gave reasons related to security. Nearly all of them had "heard good things" about Firefox.**

Tables 3a-3d gives us more insight into how people responded to the ballot. Opera was the most "sticky" browser, with 92% of Opera users wanting to stay. Next was Safari with 75%, Chrome with 72.63%, Firefox with 70.53%, and lastly Internet Explorer with only 61.97% of its users wanting to stay on board.

Of current Firefox users, 15.26% wanted to go to Chrome, 7.89% to Internet Explorer, 3.68% to Opera, and 2.63% to Safari. Interestingly, **51.79% of all the Firefox users who wanted to switch wanted to go to Chrome.** 50% of people switching from Chrome wanted to go to Firefox.

Of the people who saw the browser, 29.09% wanted to switch browsers from the one they currently used. Of these, 50% don't currently use Firefox, and 18.75% wanted to switch to Firefox.

Of the Internet Explorer users who encountered the ballot, 22.53% wanted to switch to Chrome, 8.45% to Firefox, and 7.04% to Opera. Those that wanted to switch to Chrome, most answers revolved around having used the Google search engine and having heard that Chrome was fast. Of those that wanted to switch to Firefox, most answers revolved around having heard that it was secure and fast. It seems that those who would switch to Chrome or Firefox have a high chance of doing so because of recognition, but in Chrome's case it's because of prior Google use while in Firefox's case it's because they have heard from others that Firefox is a good browser. **The one feature that people associated positively only with Firefox was security.** This was mentioned by the vast majority of people interested in switching, and was very rarely mentioned in relation to any other browser.

Recommendation: In the ballot, Firefox is in danger of losing users to Chrome. Firefox has brand recognition because of word of mouth, but Chrome has recognition because people already know and use Google Search. Firefox should focus on security and safety, as these are ideas people associated strongly with Firefox but with no other browser.