

Eye Tracking Study

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An In Depth Look at Interactions with Google using Eye Tracking Methodology



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Foreword

At a recent networking reception, I ran into Geoff Ramsay from eMarketer. Geoff started by saying that he liked the research we did and that he had included some of it in his collected reports. Then Geoff asked what he warned would be a loaded question. "Is the research valid? Do you stand behind the numbers?" As so often happens in these situations, I started to respond, someone else joined our "conversation knot" and I don't think I ever finished answering Geoff's question. So, in a much delayed and round about way, here you go Geoff.

This will be the fourth research white paper that Enquiro has produced. In this process, we have created an approach that has refined itself in the past year.

Our goal is not just to throw a lot of numbers and study results at you. When we undertake a project, we have an idea of the types of things we'll find. Sometimes we're right on track, and sometimes we're completely surprised. But regardless of the findings, we try to tell you a story, supported by the research findings.

In this study in particular we found a number of things that we think are indicative of a bigger, and all too vague, picture. They start to provide more insight on how it is we search. As we start to find these, we often step beyond the "safe" area defined by the study findings and speculate on what it is we might be seeing. We think that as unscientific as it is, the true value of our studies lies in this speculation.

So, to answer Geoff, in designing our studies we try to keep the methodology as sound as possible. We stick to accepted methods of sampling and analyzing data. We work with recognized experts in the field to ensure that there are no unintentional biases or inaccuracies embedded in the results. So yes, we stand behind our numbers.

But, we also try to look beyond the findings and sometimes stretch a little to "connect the dots" using our growing base of insight into search behavior and our domain expertise to put forward some scientific guesses. We think it's what sets our research apart. In this study, we've tried to indicate these areas with the prefix "Insight". Anywhere where you see this preceding a title, we've moved a little beyond the data from the study and tried to interpret what that data means.

Hope that answers your question Geoff.

One last note. On behalf of the partners who helped create this research initiative, Kevin Lee at Did-It, Colin Johnson and Greg Edwards at Eyetools, and Steve Alston and myself, Gord Hotchkiss, at Enquiro - thank you for your interest.

In this study we found a number of things that we think are indicative of a bigger, and all too vague, picture.

Introduction

Since we first mentioned the Golden Triangle at Search Engine Strategies in New York at the end of February, the image has been posted to dozens, or perhaps hundreds, of forums, blogs and websites. I have spoken of the Golden Triangle in San Francisco, Toronto, Orlando and London, England since then, and most members of the audience had heard of it. For many, the image confirmed what they already intuitively knew. For others, the intensity and concentration of the scan patterns was surprising.

Although we have been doing research on how people use search engines for a year and a half, this was the first time we had findings with such visual impact.

The research, despite the fact that it was only conducted on Google (or perhaps because of it), has caught the attention of all the major search engines. Although we have been doing research on how people use search engines for a year and a half, this was the first time we had findings with such visual impact.

To this point, we have teased the search engine marketing community mercilessly as we've released some findings at various industry shows, all the while promising that the white paper would be available soon. Meanwhile, we were furiously coding over 300 individual session slices so we could do further analysis. It seemed that for every variable we hand coded, we immediately thought of 3 others. At some point, we had to say enough.

The data set was rich and the technology offered exciting new insights to launch our speculations from. We have fallen in love with eye tracking technology and plan to continue down the path we started. But for this data set, we have finally put it to bed and wrapped up the white paper.

In this, we think any search marketer, or even developers of search technology, will gain insight that will make a significant impact on their search strategies. Not since our original white paper, *Inside the Mind of the Searcher*, have we been afforded such a glimpse into the mental processes that govern search sessions. In this paper, you'll learn about the complex interplay between page elements such as top sponsored links, OneBox results (Google's News, Product or Local listings that appear just above the organic results), organic results and side sponsored ads.

You'll learn how our eyes move around the page in excruciating detail, how we scan listings, what catches our eye and what motivates us to click on one listing over another. Is position everything? If we don't find what we're looking for right off, do we lose confidence in the listings? Does the eye move differently the first time it sees a results page versus its return to the same page? How many listings do we look at before we decide? Do different demographic groups scan differently? These are just a few of the questions we try to answer.

Like any research project, it will answer some questions, but likely will raise more. This is okay, as long as it helps push the boundaries of our knowledge of how people search a little further out. We feel confident that this white paper accomplishes this.

One last note, and this is very important to get the full value of this paper. We make extensive use of images from the study, both aggregate heat map images that show the cumulative activity from several sessions and individual page session images. There's a bit of a trick to interpreting these images. Before you go too much further, we highly recommend the <u>sections at the end</u> on how to read these images.

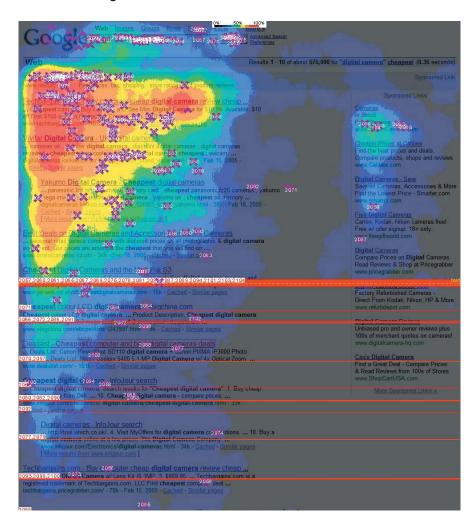
Importance of the Golden Triangle

Since we first talked about the appearance of the Golden Triangle, there has been much discussion in forums and blogs about how this confirms the importance of being number one. In reality, as we looked more at the individual behavior of searchers and how they interacted within this area, we saw that the reasons that lead to the formation of the triangle are more complex and interdependent than the simple conclusion that position is all important.

What is Google's Golden Triangle?

The Golden Triangle is a distinct area of intense eye scan activity that is shown in the diagram below. It's important to understand that the Golden Triangle pattern is seen in first time visits to a results page. We'll explain this more in the <u>Search Confidence</u> section.

The Golden Triangle



If your listing is not in the Golden Triangle, your odds of being seen by a searcher are dramatically reduced.

Generally speaking, if your listing is not in the Golden Triangle, your odds of being seen by a searcher are dramatically reduced.

Let's carry this offer to a bricks and mortar analogy. Think of the search results page as a shopping mall. Think of the eye activity as foot traffic. In a mall, you have anchor tenants who attract the majority of traffic. Usually, malls try to have 2 or 3 anchor tenants distributed evenly around the perimeter of the mall so foot traffic is generated moving from anchor tenant to anchor tenant. All the other tenants take advantage of this by catching the attention of the foot traffic as they walk by.

The (search page) anchor is the number one organic result. Everything else is a detour on the way.

The Google search results page has one anchor, and it's usually in the upper left corner. The anchor is the number one organic result. That's what we're all looking for. Everything else is a detour on the way. Yes, top sponsored results get high visibility and a reasonable number of click throughs, but more often than not, it's because they happened to catch our attention while we were looking for the top organic listing. With rare exceptions, we're not looking for a sponsored result.

Let's go back to our analogy. What would happen if a mall had only one anchor in a corner of the mall that every single shopper went to see? You would see a flurry of foot traffic in this corner of the mall and little everywhere else. The further you got from the anchor, the less traffic you would see. That's the Golden Triangle. And in this case, the anchor is very easy to see. It's firmly established in the upper left corner of the search results page. That's where our eyes first go to see the top organic listing. We may have to reorient ourselves from that orientation point, but that's where we'll start.

The Golden Triangle and the Google Effect

In looking at the Golden Triangle, there's an important point to keep in mind. The Golden Triangle exists more because of the effectiveness of Google rather than the searcher's preoccupation with position. Let us introduce you to the Google Effect.

One of the advantages we had that led to us to being able to separate out the importance of position from other factors was a study that was being run at the same time as the eyetracking study we conducted with the University of Tulsa. In this study, we did a structured conjoint analysis of all the factors that lead to search searchers clicking through on a particular listing in a given page of search results. We looked at position, presence of trusted brands, presence of trusted URLs, relevant words from the search queries in the title, relevant words from the search query in descriptions and the presence of words like "review" and "consumer information". In the end, the number one factor in precipitating a click through on a particular listing was relevant words in the title, with relevant words in the description being second most important. Position came in after these in significance.

So why the Triangle? Why the overwhelming number of click throughs on the number one listings in two different studies we've conducted (this eye tracking study and the Business to Business study done in October, 2004)? Obviously, position is important.

It appears that the predominance of click throughs on the number one listing comes more from a conditioned behavioral response due to a natural pattern in how we assimilate information