

BARRIERS ON A SEARCH RESULTS PAGE

a mini-whitepaper by Enquiro Research based on eye tracking and usability tests

Barriers in Search

Because Enquiro has a notable reputation in understanding Search Engine Results Page (SERP) scanning patterns, it only makes sense for me to start my explanation of barrier scanning with the effects it has on the SERP.

By now, most of the people reading this are probably pretty familiar with the traditional F-scan pattern associated with a SERP (A user lands on the top-left corner, makes a quick vertical scan of the page and follows it with two short lateral scans.) In fact, the Google Golden Triangle* can be viewed, due to a higher perceived relevance of Google's top listings, as a condensed F-scan.

Barriers on the SERP are partially responsible for forcing this type of scan pattern. For instance, the white space that separates the listings from the right rail (the right-hand column on the SERP) acts as a natural obstruction for a user's lateral scan. In other words, visual barriers are the reason why users don't read across the entire page. The "fold" acts as another natural barrier that forces the user's vertical scan to the top listings or initial consideration set.

I think that these barriers, like the banks of a river, are widely accepted and recognized as major design elements that almost fence in a user's SERP engagement. Why else would Search Engine Optimization (SEO) – a marketing practice determined to help businesses achieve top listings or the area of greatest promise – exist?

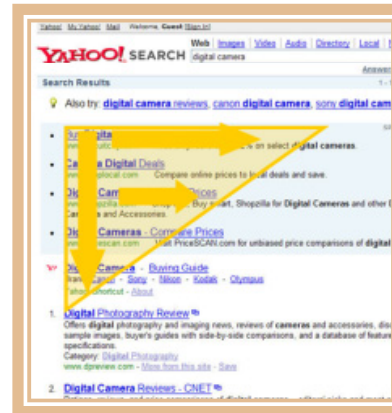
Are there other more powerful barriers on a SERP – barriers that can actually alter this natural F-scan? Yes.

The slightest variations in the expected layout of a SERP can create a very different overall scan pattern, and as Search moves towards a more comprehensive media layout – displaying combinations of news, rich media, video etc.. – the ramifications of barrier scanning may be huge.

For example, local results are becoming commonplace, but depending on the behavioral intent of the user, local results can act as a barrier in the natural scanning pattern.

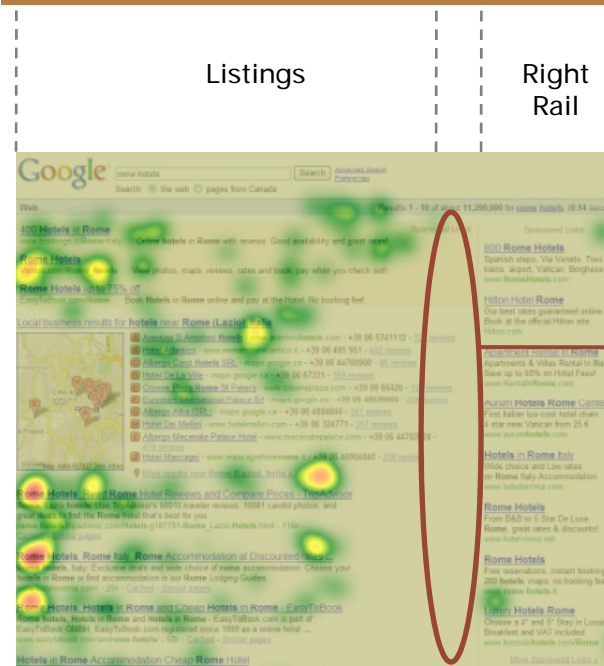
*Google Golden Triangle is a distinct area of intense eye scan activity located in the top left corner of Google's search results page (SERP). See Enquiro's Eye Tracking Report available at www.enquiroresearch.com/whitepapers

Traditional F-scan on SERPs



The F-scan pattern is the natural baseline engagement for the majority of North American users on a SERP. The depth and length of the vertical and lateral scan may be unique for a given Search Engine, but the pattern is uncannily similar.

Barriers on the SERP



The white space between the listings and the right rail can act as a visual barrier.

Barriers in Search... cont'd

In fact, the presence of local search is enough to push the anchor point to just below the local listings, when user intent is research (looking for reviews and comparison pricing). The result is an up to 50% drop in relative fixations on the top sponsored listings and a 30% drop for top organic listings. However, the biggest impact may be in click-thrus, where clicks on top sponsored listings dropped by 60% and clicks on top organic listings dropped by 35%.

This doesn't mean that local listings don't work. They do – for certain intents.

This doesn't mean local listings do not make the total SERP more relevant, because they do – for certain intents.

It does mean however, that this variation in the landscape of the SERP *does* alter the natural scan pattern of a user. If user intent is research, that intent pushes the anchor point below the local listings at the behest of fixations on the top sponsored listings. In a nutshell, it causes a much deeper scan of the page. If you are advertising at a premium in the top sponsored position, consider that local results may be pulling users' eyes away from your ad.

Are there more barriers associated with Search?

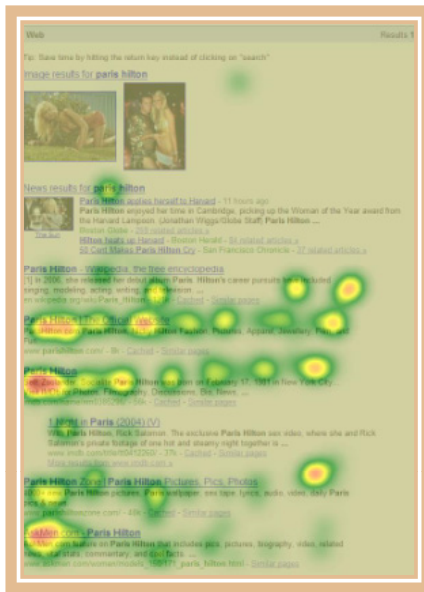
You bet.

Local Listings Heatmap

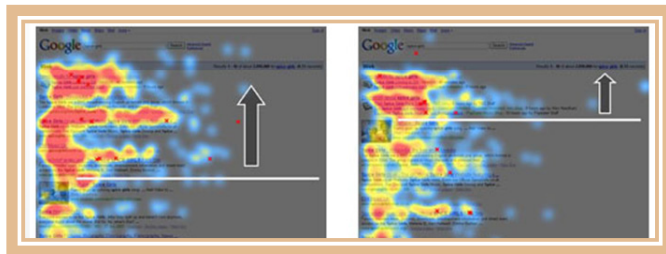


Notice how the local listings are an overlooked area of the page and how the scanning is pushed around this page element when users were intent on research. What's more, because the local listings sat right on the page fold, 80% of users used the scroll bar to take the top third of the SERP completely out of consideration.

Universal SERP



Images and tabbed listings can also act as walls or fences to a user's scan pattern...



... as can video listings popping up on the SERP



Barriers in Search... cont'd

Thumbnails are also starting to become very commonplace on the new universal SERP. Whether they are video or image results interlaced throughout the SERP or just below the top sponsored listings – these subtle differences in the anticipated SERP layout impact the way users scan the page.

Without a doubt, users tend to chunk up a page. **We scan in chunks and depending on the information scent or perceived relevance of the chunk, we either click or move to the next one.**

It is very unlikely that we will ever retrace our steps; in fact, if a clickable link doesn't show itself by the end of the first SERP we are more likely to refine our query, go on to the next page, or abandon the SERP rather than pick the best listing of the ones we've already seen. In a way, the F-scan is the natural illustration of chunking the area of greatest promise or that initial consideration set.

However, these multimedia inserts are often perceived as natural walls or barriers for a chunk. In other words, users use them to frame in a chunk – meaning if you are sandwiched between these listings and there isn't enough total information scent in the chunk, you may lose your click to the next logical chunk.

But what if I am the best listing in that chunk, wouldn't I get the click?

You'd like to think so, **but the fact of the matter is that the user usually makes a cursory image map of the SERP, chunking the page and working from chunk to chunk, in the first three seconds.**

On that first scan, if the chunk itself is not relevant – even if one listing is clearly inline with the user intent – five out of six times the user will abandon the entire chunk and move on to the next one.

Not only do these barriers act as walls for chunking, but if a user isn't anticipating or expecting to click on images, videos, or other rich media listings, these elements also push the scanning further down the page.

Barriers in Search... cont'd

It is not only the type of content, but also the layout of that content that can force a listing to act as a barrier.

For example, some niche search engines embed preferred listings or sponsored listings halfway down the SERP. Sometimes listings are shaded or boxed or the font is altered. This variation acts as a perceived barrier. In other words, a user interprets this variation as a break in the natural flow of the page.

The screen shot to the right illustrates this variation. If the bulk of the page is one font type (in this case bolded) the non-bolded is automatically deemed less relevant. If the non-bolded font is cut by the page fold, the user assumes the lower part of the page is less relevant and 65% will not scroll below. Whereas, if the listings are shaded and surrounded by a different font, obviously the user instantly interprets the shaded section as less relevant.

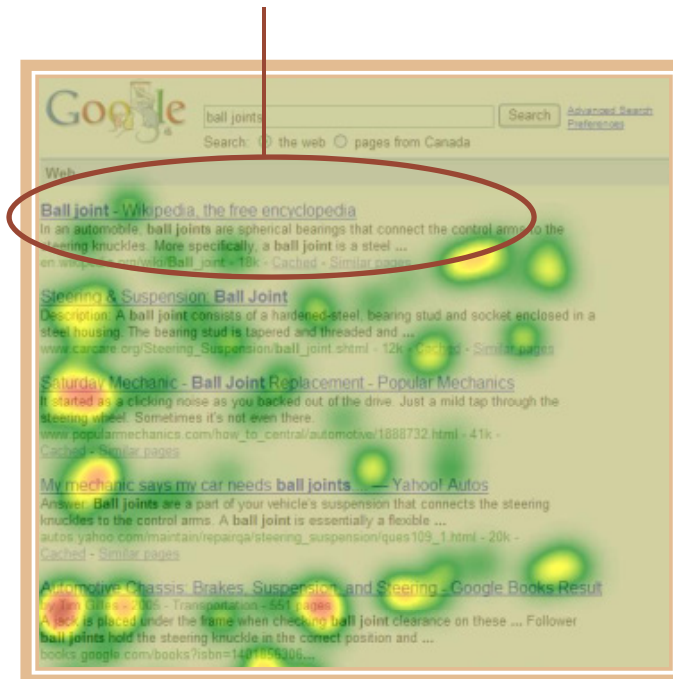
In addition, our recent research has found another surprising result, which we have started calling the *Wikipedia effect*.

Google is definitely amidst a strong love affair with "Wikis", judging user-generated content as having higher authority and placing it higher in SERPs. But all users aren't necessarily the same, especially if they are launching a commercial query. To these users, who use broad terms 80-90% of the time – terms like "big screen tvs" and not "buy a big screen TV" – a Wikipedia listing is not relevant at all.

Users in commercial phases want to buy a TV – not read about how they work. But interestingly, a Wikipedia listing actually acts as a physical barrier, pushing a user's gaze below the listing if the majority of the visible page was below (Wikipedia in the top organic). It pulls fixations from the sponsored listings or stops users from a deeper vertical scan of the page if the Wikipedia listing is in second or third position.



A Wikipedia listing can act to corral all the scan activity below or above itself, depending on the number of listings on the page that are visible to the user and the information scent in that area.



Barriers in Search - Summary and Meaning

So what does it all mean? After all, it isn't rocket science. Different design elements cause different scanning patterns, even in Search. Truthfully, from the big picture perspective, there are a lot of reasons.

The search landscape is changing because the availability of bandwidth is increasing – meaning there are more rich media applications available online and different types of relevant content, all of which is being indexed and listed by the search engines.

This means that being in the top sponsored position might not be as valuable, if there are indented organic listings, Wikipedia listings, or YouTube videos and images on the SERP.

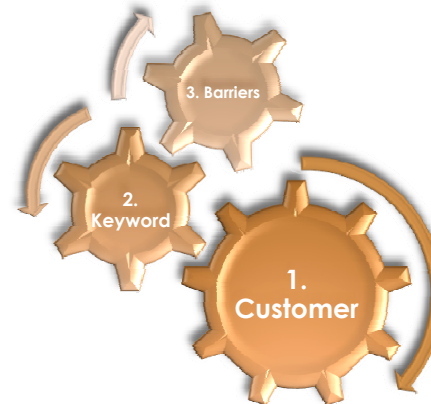
It also means that the search marketing best practices we have built with the traditional F-scan pattern being the baseline, are not always applicable. Clearly, if you understand that users scan in chunks and that differentiation on the SERP can act as a barrier or fence to scan activity, you want to be the most relevant listing in front of any natural or perceived barrier. For example, if a Wikipedia listing is sitting in the 4th organic spot (*right on the fold*), your listing is in a veritable no-man's-land by being anywhere from the 5th organic spot or below.

It also means that users are making these intuitive landscape and relevancy decisions in a fraction of a second, before they have any real understanding of the actual content; and in these particular cases, you need to make sure that your listing is not getting overlooked because of any of these recognized barriers being in its vicinity.

Some New Best Practices

1. Always plan your SEM strategies around your customers and audience first and foremost – barriers, SERP layouts, images aside. If you don't know your customer and don't have them at the center of all activities, you are lost before you begin.
2. Use your analytics to look for those keyword referrals that are slumping or not performing up to a level or share of voice that your brand should necessitate.
3. After identifying areas of concern, launch queries. Can you see any of these scanning barriers? If so, maybe you should re-evaluate your SERP strategies so that you take this into account.
4. Start using these barriers to coach scans to key areas of interest. Instead of looking at barriers as an impenetrable wall, look at them from a different perspective. How can you use those walls to build a maze, where the cheese is your listing?
5. Make multivariate testing of your sponsored listings a recurring strategy. There is a thin line between a differentiation strategy and having your listing appear so different that it actually becomes a barrier.

New Best Practices



Keep the gears moving!

1. Think of your audience or customer first.
2. Revise keywords.
3. Identify any barriers.

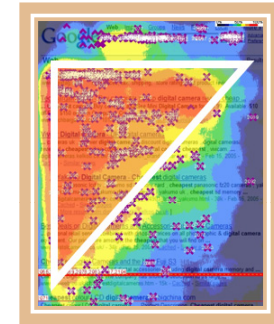
Users Scan Patterns are Just Like Moving Water



History Lesson

Five years ago we wrote a little paper about the Search Engine Results Pages (SERPs) on Google and the typical user behavior on the page. We had eye-tracking capabilities in-house and a theory that there was a baseline user interaction with Search. Not surprisingly, we found this to be true. As a direct result of our analysis, we coined the term the “Golden Triangle” – which was that area of greatest promise on a SERP – the top-left area of the page.

The results weren't supposed to be earth shattering – it is, after all, how we are taught to read – but being able to put quantitative numbers to the theory proved to be pretty big news. **Unfortunately, everybody starting use this one paper as proof for an overall Internet usability best practice... no matter what, put the important information in the top left of the page.**



In reality, the “golden triangle” doesn't apply to a website in the same way it applies to Search. First of all, only aggregators have a layout like a SERP; second, even though the orientation point in a Western audience is generally the top-left hand corner of the page, the anchor point may be something entirely different – and **it is a page's anchor point and the barriers around that anchor point that affect the successful scanning of your content...** and eventual migration to your conversion trigger.

Let me repeat myself... **putting everything in the top-left corner is NOT the secret to success.**

What is Barrier Scanning?

Hydrodynamics is the study of ideal fluid flow of water – a sub-discipline of fluid mechanics, but it is really the study of how speed, pressure, density, temperature, and landscape can affect the ideal motion of a liquid. It may sound terribly inapplicable to the study of website usability, but I assure you, it has significant meaning.

Think of a stream working its way down from the glacial fields of the Rockies, twisting and turning with each bend or around a fallen rock; taking hundreds, if not thousands of years to cut through the landscape and eventually form canyons and rivers.

Think of how a boy hiking with his father in the woods can build a dam of sticks and mud to create a puddle, or how an engineer can build a hydroelectric wall of concrete and generators to build a lake where there once was a rambling creek in a valley.

There are even instances where the viscosity (friction) and temperature will work together to make water flow up hills (Stokes Flow).

In other words, water flow is very much a product of the landscape, where a tree is placed will divert a stream, just as rock can be made to skip or cause ripples in a puddle. **User scan patterns are not that much different than the topological perspective of moving water**; however, where water will build up pressure that can rupture levees and drown entire cities, more often than not, pressure on user scan patterns will lead to an abandonment and not a fast b-line to your conversion trigger.

Barrier scanning is a term given to the type of scan behavior that deviates from the ideal user flow due to those onsite design elements that can impede, redirect, or coach a certain type of user engagement. It's important, because it is this type of behavior that is working in combination with the value of your content, benefit messaging, and relevance to cause your websites high abandonment rates, low conversion rates, and lower ROI.

Understanding barrier scanning can greatly improve your websites ability to resonate with your market – by helping to make navigation and conversion paths more inline with an intuitive user response, by making your page more dynamic, and by giving your content a better chance to sell to your unique visitor.

And realistically, all those things should combine to make a website that works better and stronger.

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Glossary of Terms

Anchor Point: When website users first see a page and something catches their eye, they may be drawn to a specific location and perhaps influenced by location, color, advertising, a box or other point from which they then explore the page and decide upon areas of interest. These areas form critical points of reference for the whole website design process and are considered to be key to whether a user remains on the page for any duration of time or moves elsewhere.

Area of Greatest Promise: There is an almost universal behavior amongst North Americans when they interact with search results. The very first thing they do is move their eyes from wherever they entered the page up to the upper left corner, usually orienting ourselves on the border that tends to delineate the search results from the company logo area above. We use this as our "anchor point" and from there we generally start our scan path through the results page in a very small triangle.

Fixation: Visual gaze on a specific point.

Information Scent: Textual cues and visual hints that illustrate to a searcher whether the website being visited has the information they have been searching for. Almost everyone orients themselves in the upper left corner of a SERP. From there they do a vertical scan down near the left side of the listings to look for information scent in the titles present.

Rich Media Applications: Any combination of audio, graphics, video and animation that requires more bandwidth and storage than ordinary text.

Right Rail: A column of information on the right side of the Search Engine Results Page (SERP).

Search Engine Optimization (SEO): A marketing practice determined to help businesses achieve top listings or the area of greatest promise.

Barriers on a Website

March 2008 – With the use of heatmaps, Enquiro Research shows how webpage graphics can act as either a barrier or a gateway to essential information. Can graphics prevent user navigation? Do graphics coax users towards essential website information? Does multimedia coax users into a website or trap them? Find the answers in the newest Enquiro Research whitepaper.

Chinese Search Engine Engagement

January 2008 - Comparing the two search engines predominantly used by Chinese searchers – Baidu and Google.cn – Enquiro conducted an eye tracking study with Chinese students to answer how Search user interaction can differ between cultures, languages and reading patterns. How do Google and Baidu compare? And how do Chinese searchers use organic vs. paid listings?

Marketing to a B2B Technical Buyer

December 2007 - Using Honda as a test brand, this first-of-its-kind online study conducted by Enquiro and commissioned by Google sought to quantify the branding impact of differing brand listing placements on the search results page. The research discovered a significant correlation between companies in the top organic and sponsored ad placements and consumer brand affinity, brand recall and purchase intent.

The Brand Lift of Search

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Search Engine Results: 2010

August 2007 - What search engines may look like in the future, including personalization, universal search, eye tracking and interviews with leading industry experts. What do the next three years hold for the world of search? Will the search results page in 2010 look similar to what we use today? It is all discussed in this new Whitepaper.

B2B Survey 2007

May 2007 - This white paper is a high level overview of how business to business search behavior is influenced by role of the buyer and phase of the buying cycle. Data was collected online in March 2007 and included over 1000 business to business respondents.

Enquiro Eye Tracking Report II: Google, MSN and Yahoo! Compared

November 2006 - This whitepaper from Enquiro examines the question of whether Yahoo and MSN users interact with search results in the same way as Google users. It attempts to explain some of the differences in search behavior noticed on Yahoo and MSN and delves into the factors that appear to influence the way in which users interact with search results.



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