Defining the Search Experience
by Marianne Sweeney

EDITOR’S SUMMARY
While site designers, content managers and information architects each frame the effectiveness of a website very differently, the end user’s primary need is a successful search experience. Searchers want information that is personally relevant, factual and trustworthy. Yet search and retrieval systems rank results based on arbitrary factors such as numbers of links, the age of a site and frequency of content changes or unknowable indicators of presumed quality. Information architects (IAs) and user experience specialists should assert their understanding of the search experience, expanding their focus from navigation and design to serving peoples’ goals in search. IAs should design sites with search engine optimization in mind, incorporating and maximizing the search value of end users’ typical terminology.

KEYWORDS
search engine optimization search terms
retrieval effectiveness usability
end user searching information architecture

At the 2007 IA Summit in Las Vegas, I examined the intersection of IA and SEO. Since that time, search engines have been very busy incorporating more and more “behavior triggers” into the way in which machine relevance is determined. There is a major disconnect between how humans decide what is relevant (is it honest, true, high quality?) and how machines determine relevance (does it fit strictly within the rigid parameters of logic defined by computational math?). What users click on, how long they stay on the destination page, whether they interact with the destination page and how they iterate their searches are some of the human behavior used to as triggers for relevance calculation.

Yet user experience professionals often neglect optimizing a site for search engines. They are busy designing the on-the-site experience at the expense of designing how customers will find the site. If customers cannot find the site, customers cannot experience the site.

Assumptions All Around
Clients assume that the hot digital agency is going to deliver a site that is optimized for the biggest demand generator. Project managers hope that the developers are doing it. IAs figure that the content strategists have it covered. Content strategists believe that the magic of their strategies and the high-end auto-classification tool they recommend will result in optimization. Many designers could care less as they focus on visual design choices.

To Serve Man: Us against the Machines
Anyone who has read Philip K. Dick knows there is a big difference in how machines and people think, find information and determine its
relevance. Humans, squishy thought-processing-bipeds that we are, look for information in a free form way that is heavily influenced by our emotions and environment. We are easily distracted from our information tasks (not always a bad thing) and constrained by the limits of our biology and by the technological barrier between us and the stored data. Machines are constrained only by their instructions. They are literal, sequential and directed. And then there’s Google, the 800-pound gorilla that introduced the crack cocaine of the simple box that abstracts the not-so-simple operation of indexing and annotating an information corpus that has exceeded one trillion pages.

The gulf between ourselves and our WD-40 brethren is even more pronounced when determining what is relevant. For the search engine, relevant means satisfying a long list of conditional statements. If there are links pointing to the page, then the page is relevant. If there are social media references about the site, then the site is relevant. Such determinations are inherently flawed because they favor individuals who can code or have access to link builders and those who participate in social media over those who do not.

A more critical flaw is that humans do not rely on conditional statements for relevance. We are emotional in our relevance judgment. To us, relevance is good, ethical or trustworthy – all of which are measured by direct experience. Unfortunately, search engines are not very good at measuring experience; just ask Clarabelle Rodriguez [1].

Clarabelle did a search on Google for designer eyewear. She selected Décor My Eyes, the #3 result, and made her purchase. After all, #3 on Google has to be a good site, right? Wrong. The eyeglass frames delivered were counterfeit. According to news accounts in the New York Times and elsewhere, Clarabelle returned the frames, and that kicked off a sequence of harassment from Décor My Eyes that included threats, intimidation and cyber-stalking.

How could such a dishonest industry get to #3 in Google’s search results for “designer eyeglass frames”? The high number of mentions in social media was a key component. Search engines like social media because it is an indicator of relevance. What the machine missed is that most of these mentions were referencing the problems encountered by doing business with Décor My Eyes. Search engines and other machines have trouble understanding sentiment as they are not sentimental by nature.

Search Engine Optimization: How SEO works:

**SEO Step 1 Search – Search crawler (Google) goes out looking at content across the web**
- Adds content to the search index.
- Examines terminology that appears on the page.
- Asks, “What other pages link to this page?”
- Collects an estimated 200 different signals related to the document itself.
- Presents search results based on these signals.

**SEO Step 2: Your Response -- Initial Steps**
- Gather/Evaluate – get a good understanding of your organizational and user needs
- Listen to conversations on social networks
- Attend to folksonomy
- Explore taxonomic relationships in site/in field
- Identify important words & labels

**Step 3. You shape content to support search results**
- Focus on your “architectural goals”
- Build SEO into your process for authoring content.
- Attend to language in page headings and page title tags.
- Conduct keyword research: make sure people are using the terminology you are highlighting.
need and cannot articulate. Since the floodgates of self-publishing released billions of pages to the web (and millions of users unfamiliar with the intricacies of Boolean search prayed for relevance), the search engines have been incorporating human factors as they compute relevance. PageRank, the “one link/one vote” relevance model, was the first introduction of human direction, albeit biased to those who know how to create/acquire links. As hardware becomes more robust, the software becomes more sophisticated.

Constant Change

In 2003 the search engines took a great leap forward with the Hilltop [3] and HITS [4] algorithms that introduced the concept of topic experts to relevance calculation and introduced authority pages. Links from authority pages are weighted more than from contextually unrelated pages. A topic-sensitive algorithm came into being in 2002 that uses a web-based ontology (rumored to be that which powers the Open Directory and Google Directory) to find related and therefore relevant documents.

The most recent changes at Google are of a decidedly less reassuring nature to website owners and content strategists. The 2011 May Day update introduced Google’s new file structure and real-time indexing that sees content coming into search results almost immediately upon publication. It also reveals a pecking order for indexing with some sites getting more attention than others based on site age and frequency of change. The most recent Google update, Panda (aka Farmer), has caused the most controversy to publishers. With it, Google attempts to raise the quality of documents on the web by declaring some content sites of inherent low quality.

Our Call to Action

While the search engines charge ahead in giving users what they think they want, the information architecture/user experience community most able to deliver what users should have remains strangely passive. Information architects spend more time designing navigation systems than search aids despite research that shows a preference for search over navigation. User experience architects focus on home page layout rather than extending design to the search and search results pages.

There is time for us to take our rightful place in designing the information-finding experience from start to finish. We need only to extend our focus to include our users most important interaction with the site, finding it and finding what they need once they get there.

Resources Mentioned in the Article


