

THE BEGINNERS
GUIDE TO SEO

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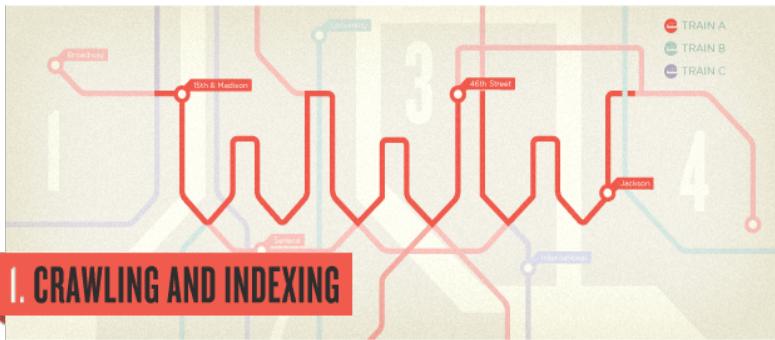
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CHAPTER ONE

HOW SEARCH ENGINES OPERATE



Search engines have two major functions: crawling and building an index, and providing search users with a ranked list of the websites they've determined are the most relevant.



Imagine the World Wide Web as a network of stops in a big city subway system.

Each stop is a unique document (usually a web page, but sometimes a PDF, JPG, or other file). The search engines need a way to "crawl" the entire city and find all the stops along the way, so they use the best path available—links.

The link structure of the web serves to bind all of the pages together.

Links allow the search engines' automated robots, called "crawlers" or "spiders," to reach the many billions of interconnected documents on the web.

Once the engines find these pages, they decipher the code from them and store selected pieces in massive databases, to be recalled later when needed for a search query. To accomplish the monumental task of holding billions of pages that can be accessed in a fraction of a second, the search engine companies have constructed datacenters all over the world.

These monstrous storage facilities hold thousands of machines processing large quantities of information very quickly. When a person performs a search at any of the major engines, they demand results instantaneously; even a one- or two-second delay can cause dissatisfaction, so the engines work hard to provide answers as fast as possible.

1.

Crawling and Indexing

Crawling and indexing the billions of documents, pages, files, news, videos, and media on the World Wide Web.

2.

Providing Answers

Providing answers to user queries, most frequently through lists of relevant pages that they've retrieved and ranked for relevancy.

Illustration by Matt Anderson





2. PROVIDING ANSWERS

Search engines are **answer machines**. When a person performs an online search, the search engine scours its corpus of billions of documents and does two things: first, it returns only those results that are relevant or useful to the searcher's query; second, it ranks those results according to the popularity of the websites serving the information. It is both **relevance** and **popularity** that the process of SEO is meant to influence.

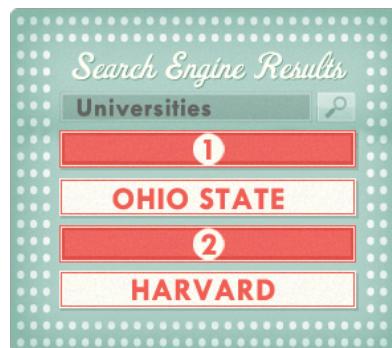
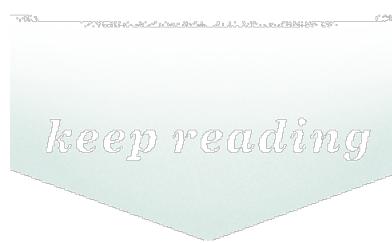
How do search engines determine relevance and popularity?

To a search engine, relevance means more than finding a page with the right words. In the early days of the web, search engines didn't go much further than this simplistic step, and search results were of limited value. Over the years, smart engineers have devised better ways to match results to searchers' queries. Today, hundreds of factors influence relevance, and we'll discuss the most important of these in this guide.

Search engines typically assume that the more popular a site, page, or document, the more valuable the information it contains must be. This assumption has proven fairly successful in terms of user satisfaction with search results.

Popularity and relevance aren't determined manually. Instead, the engines employ mathematical equations (algorithms) to sort the wheat from the chaff (relevance), and then to rank the wheat in order of quality (popularity).

These algorithms often comprise hundreds of variables. In the search marketing field, we refer to them as "ranking factors." Moz crafted a resource specifically on this subject: [Search Engine Ranking Factors](#).



You can surmise that search engines believe that Ohio State is the most **relevant** and **popular** page for the query "Universities" while the page for Harvard is less relevant/popular.

How Do I Get Some Success Rolling In? *Or, "how search marketers succeed"*

The complicated algorithms of search engines may seem impenetrable. Indeed, the engines themselves provide little insight into how to achieve better results or garner more traffic. What they do provide us about optimization and best practices is described below:



SEO INFORMATION FROM GOOGLE WEBMASTER GUIDELINES

Google recommends the following to get better rankings in their search engine:

Make pages primarily for users, not for search engines.
Don't deceive your users or present different content to search engines than you display to users, a practice commonly referred to as "cloaking."

Make a site with a clear hierarchy and text links. Every page should be reachable from at least one static text link.



Create a useful, information-rich site, and write pages that clearly and accurately describe your content. Make sure that your <title> elements and ALT attributes are descriptive and accurate.

Use keywords to create descriptive, human-friendly URLs. Provide one version of a URL to reach a document, using 301 redirects or the rel="canonical" attribute to address duplicate content.

SEO INFORMATION FROM BING WEBMASTER GUIDELINES

Bing engineers at Microsoft recommend the following to get better rankings in their search engine:

Ensure a clean, keyword rich URL structure is in place.

Make sure content is not buried inside rich media (Adobe Flash Player, JavaScript, Ajax) and verify that rich media doesn't hide links from crawlers.

Create keyword-rich content and match keywords to what users are searching for. Produce fresh content regularly.

Don't put the text that you want indexed inside images. For example, if you want your company name or address to be indexed, make sure it is not displayed inside a company logo.

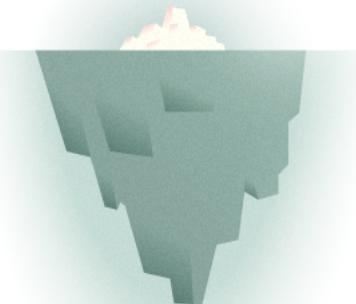
So what you're telling me is that this is just the tip of the search marketing iceberg and there's a ton more?

yes.

Have No Fear, Fellow Search Marketer!

In addition to this freely-given advice, over the 15+ years that web search has existed, search marketers have found methods to extract information about how the search engines rank pages. SEOs and marketers use that data to help their sites and their clients achieve better positioning.

Surprisingly, the engines support many of these efforts, though the public visibility is frequently low. Conferences on search marketing, such as the [Search Marketing Expo](#), [Pubcon](#), [Search Engine Strategies](#), [Distilled](#), and Moz's own [MozCon](#) attract engineers and representatives from all of the major engines. Search representatives also assist webmasters by occasionally participating online in blogs, forums, and groups.



TIME FOR AN EXPERIMENT

There is perhaps no greater tool available to webmasters researching the activities of the engines than the freedom to use the search engines themselves to perform experiments, test hypotheses, and form opinions. It is through this iterative—sometimes painstaking—process that a considerable amount of knowledge about the functions of the engines has been gleaned. Some of the experiments we've tried go something like this:

1. Register a new website with nonsense keywords (e.g., ishkabibbell.com).
2. Create multiple pages on that website, all targeting a similarly ludicrous term (e.g., [yoogewgally](http://yoogewgally.com)).
5. Record the rankings of the pages in search engines.
6. Now make small alterations to the pages and assess their impact on search results to determine what factors might push a result up or down against its peers.

3. Make the pages as close to identical as possible, then alter one variable at a time, experimenting with placement of text, formatting, use of keywords, link structures, etc.
4. Point links at the domain from indexed, well-crawled pages on other domains.

7. Record any results that appear to be effective, and re-test them on other domains or with other terms. If several tests consistently return the same results, chances are you've discovered a pattern that is used by the search engines.

An Example Test We Performed

In our test, we started with the hypothesis that a link earlier (higher up) on a page carries more weight than a link lower down on the page. We tested this by creating a nonsense domain with a home page with links to three remote pages that all have the same nonsense word appearing exactly once on the page. After the search engines crawled the pages, we found that the page with the earliest link on the home page ranked first.

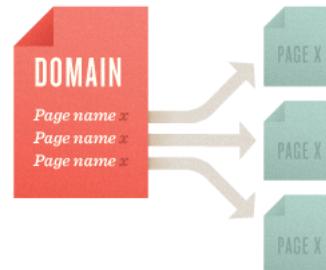
This process is useful, but is not alone in helping to educate search marketers.

In addition to this kind of testing, search marketers can also glean competitive intelligence about how the search engines work through patent applications made by the major engines to the United States Patent Office. Perhaps the most famous among these is the system that gave rise to Google in the Stanford dormitories during the late 1990s, PageRank, documented as [Patent #6285999](#): "Method for node ranking in a linked database." The original paper on the subject – [Anatomy of a Large-Scale Hypertextual Web Search Engine](#) – has also been the subject of considerable study. But don't worry; you don't have to go back and take remedial calculus in order to practice SEO!

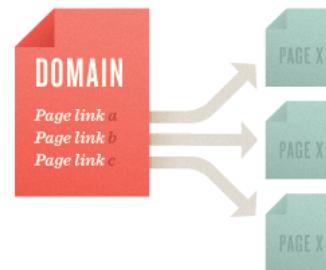
Through methods like patent analysis, experiments, and live testing, search marketers as a community have come to understand many of the basic operations of search engines and the critical components of creating websites and pages that earn high rankings and significant traffic.

The rest of this guide is devoted to clearly these insights. Enjoy!

“Step” to “Domain”



“Step” to “Domain”

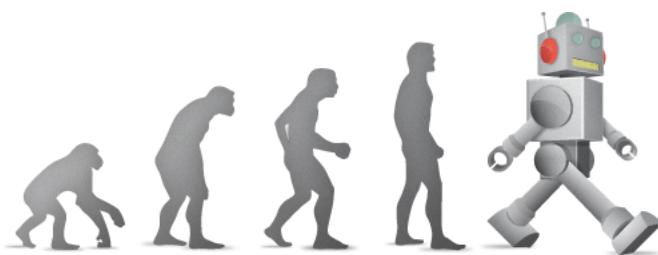


CHAPTER TWO

HOW PEOPLE INTERACT WITH SEARCH ENGINES



One of the most important elements to building an online marketing strategy around SEO is empathy for your audience. Once you grasp what your target market is looking for, you can more effectively reach and keep those users.



We like to say, "**Build for users, not for search engines.**" There are three types of search queries people generally make:

"Do" Transactional Queries: I want to do something, such as buy a plane ticket or listen to a song.

"Know" Informational Queries: I need information, such as the name of a band or the best restaurant in New York City.

"Go" Navigation Queries: I want to go to a particular place on the Internet, such as Facebook or the homepage of the NFL.

When visitors type a query into a search box and land on your site, will they be satisfied with what they find? This is the primary question that search engines try to answer billions of times each day. **The search engines' primary responsibility is to serve relevant results to their users.** So ask yourself what your target customers are looking for and make sure your site delivers it to them.

It all starts with words typed into a small box.

How people use search engines has evolved over the years, but the primary principles of conducting a search remain largely unchanged. Most search processes go something like this:

1. Experience the need for an answer, solution, or piece of information.

2. Formulate that need in a string of words and phrases, also known as "the query."

3. Enter the query into a search engine.

4. Browse through the results for a match.

5. Click on a result.

6. Scan for a solution, or a link to that solution.

7. If unsatisfied, return to the search results and browse for another link or ...

8. Perform a new search with refinements to the query.

The True Power of Inbound Marketing with SEO

Why should you invest time, effort, and resources on SEO? When looking at the broad picture of search engine usage, fascinating data is available from several studies. We've extracted those that are recent, relevant, and valuable, not only for understanding how users search, but to help present a compelling argument about the power of SEO.

$$H = \frac{1}{2M} (P_x^2 + P_y^2) + U(x^2 + y^2)$$
$$H = \frac{1}{2M} (P_r^2 + P_{\theta r}^2) + U(r)$$
$$= SEO$$

Google leads the way in an October 2011 study by comScore:

- ★ Google led the U.S. core search market in April with 65.4 percent of the searches conducted, followed by Yahoo! with 17.2 percent, and Microsoft with 13.4 percent. (Microsoft powers Yahoo Search. In the real world, most webmasters see a much higher percentage of their traffic from Google than these numbers suggest.)
- ★ Americans alone conducted a staggering 20.3 billion searches in one month. Google accounted for 13.4 billion searches, followed by Yahoo! (3.3 billion), Microsoft (2.7 billion), Ask Network (518 million), and AOL LLC (277 million).
- ★ Total search powered by Google properties equaled 67.7 percent of all search queries, followed by Bing which powered 26.7 percent of all search.

[VIEW ONLINE](#)

Billions spent on online marketing from an August 2011 Forrester report:

- ★ Online marketing costs will approach \$77 billion in 2016.
- ★ This amount will represent 26% of all advertising budgets combined.

[VIEW ONLINE](#)

Search is the new Yellow Pages from a Burke 2011 report:

- ★ 76% of respondents used search engines to find local business information vs. 74% who turned to print yellow pages.
- ★ 67% had used search engines in the past 30 days to find local information, and 23% responded that they had used online social networks as a local media source.

[VIEW ONLINE](#)

An August 2011 Pew Internet study revealed:

- ★ The percentage of Internet users who use search engines on a typical day has been steadily rising from about one-third of all users in 2002, to a new high of 59% of all adult Internet users.
- ★ With this increase, the number of those using a search engine on a typical day is pulling ever closer to the 61 percent of Internet users who use e-mail, arguably the Internet's all-time killer app, on a typical day.

[VIEW ONLINE](#)

StatCounter Global Stats reports the top 5 search engines sending traffic worldwide:

- ★ Google sends 90.62% of traffic.
- ★ Yahoo! sends 3.78% of traffic.
- ★ Bing sends 3.72% of traffic.
- ★ Ask Jeeves sends .36% of traffic.
- ★ Baidu sends .35% of traffic.

[VIEW ONLINE](#)

A 2011 study by Slingshot SEO reveals click-through rates for top rankings:

- ★ A #1 position in Google's search results receives 18.2% of all click-through traffic.
- ★ The second position receives 10.1%, the third 7.2%, the fourth 4.8%, and all others under 2%.
- ★ A #1 position in Bing's search results averages a 9.66% click-through rate.
- ★ The total average click-through rate for first ten results was 52.32% for Google and 26.32% for Bing.

[VIEW ONLINE](#)

That's Some Spicy Data You Got There!

This particular study perfectly illustrated how little attention is paid to results on the page vs. those higher up, and how users' eyes are drawn to bolded keywords, titles, and descriptions in the organic results vs. The paid search listings.



All of this impressive research data leads us to important conclusions about web search and marketing through search engines. In particular, we're able to make the following statements:

- ★ Search is very, very popular. Growing strong at nearly 20% a year, it reaches nearly every online American, and billions of people around the world.
- ★ Search drives an incredible amount of both online and offline economic activity.
- ★ Higher rankings in the first few results are critical to visibility.
- ★ Being listed at the top of the results not only provides the greatest amount of traffic, but also instills trust in consumers as to the worthiness and relative importance of the company or website.

Learning the foundations of SEO is a vital step in achieving these

"For marketers, the Internet as a whole, and search in particular, are among the most important ways to reach consumers and build a business."

goals.

CHAPTER THREE

WHY SEARCH ENGINE MARKETING IS NECESSARY

An important aspect of SEO is making your website easy for both users and search engine robots to understand. Although search engines have become increasingly sophisticated, they still can't see and understand a web page the same way a human can. SEO helps the engines figure out what each page is about, and how it may be useful for users.

A Common Argument Against SEO

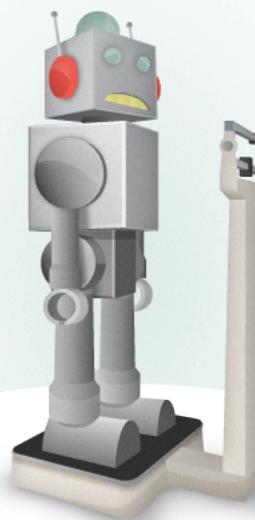
We frequently hear statements like this:

"No smart engineer would ever build a search engine that requires websites to follow certain rules or principles in order to be ranked or indexed. Anyone with half a brain would want a system that can crawl through any architecture, parse any amount of complex or imperfect code, and still find a way to return the most relevant results, not the ones that have been 'optimized' by unlicensed search marketing experts."

But Wait ...

Imagine you posted online a picture of your family dog. A human might describe it as "a black, medium-sized dog, looks like a Lab, playing fetch in the park." On the other hand, the best search engine in the world would struggle to understand the photo at anywhere near that level of sophistication. How do you make a search engine understand a photograph? Fortunately, SEO allows webmasters to provide clues that the engines can use to understand content. In fact, adding proper structure to your content is essential to SEO.

Understanding both the abilities and limitations of search engines allows you to properly build, format, and annotate your web content in a way that search engines can digest. Without SEO, a website can be invisible to search engines.



The Limits of Search Engine Technology

The major search engines all operate on the same principles, as explained in [Chapter 1](#). Automated search bots crawl the web, follow links, and index content in massive databases. They accomplish this with dazzling artificial intelligence, but modern search technology is not all-powerful. There are numerous [technical limitations](#) that cause significant problems in both inclusion and rankings. We've listed the most common below:

Problems Crawling and Indexing

- ★ **Online forms:** Search engines aren't good at completing online forms (such as a login), and thus any content contained behind them may remain hidden.
- ★ **Duplicate pages:** Websites using a CMS (Content Management System) often create duplicate versions of the same page; this is a major problem for search engines looking for completely original content.
- ★ **Blocked in the code:** Errors in a website's crawling directives (robots.txt) may lead to blocking search engines entirely.

Problems Matching Queries to Content

- ★ **Uncommon terms:** Text that is not written in the common terms that people use to search. For example, writing about "food cooling units" when people actually search for "refrigerators."
- ★ **Language and internationalization subtleties:** For example, "color" vs. "colour." When in doubt, [check what people are searching for](#) and use exact matches in your content.
- ★ **Incongruous location targeting:** Targeting content in Polish

- ★ **Poor link structures:** If a website's link structure isn't understandable to the search engines, they may not reach all of a website's content; or, if it is crawled, the minimally-exposed content may be deemed unimportant by the engine's index.
- ★ **Non-text Content:** Although the engines are getting better at reading non-HTML text, content in rich media format is still difficult for search engines to parse. This includes text in Flash files, images, photos, video, audio, and plug-in content.

when the majority of the people who would visit your website are from Japan.

- ★ **Mixed contextual signals:** For example, the title of your blog post is "Mexico's Best Coffee" but the post itself is about a vacation resort in Canada which happens to serve great coffee. These mixed messages send confusing signals to search engines.

Make sure your content gets seen

Getting the technical details of search engine-friendly web development correct is important, but once the basics are covered, you must also **market your content**. The engines by themselves have no formulas to gauge the quality of content on the web. Instead, search technology relies on the metrics of relevance and importance, and they measure those metrics by tracking what people do: what they discover, react, comment, and link to. So, you can't just build a perfect website and write great content; you also have to get that content shared and talked about.



THE COMPETITIVE NATURE OF SEARCH ENGINES

Take a look at any search results page and you'll find the answer to why search marketing has a long, healthy life ahead.

There are, on average, ten positions on the search results page. The pages that fill those positions are ordered by rank. The higher your page is on the search results page, the better your click-through rate and ability to attract searchers. Results in positions 1, 2, and 3 receive much more traffic than results down the page, and considerably more than results on deeper pages. The fact that so much attention goes to so few listings means that there will always be a financial incentive for search engine rankings. No matter how search may change in the future, websites and businesses will compete with one another for this attention, and for the user traffic and brand visibility it provides.

Constantly Changing SEO

When search marketing began in the mid-1990s, manual submission, the meta keywords tag, and keyword stuffing were all regular parts of the tactics necessary to rank well. In 2004, link bombing with anchor text, buying hordes of links from automated blog comment spam injectors, and the construction of inter-linking farms of websites could all be leveraged for traffic. In 2011, social media marketing and vertical search inclusion are mainstream methods for conducting search engine optimization. The search engines have refined their algorithms along with this evolution, so many of the tactics that worked in 2004 can hurt your SEO today.

The future is uncertain, but in the world of search, change is a constant. For this reason, search marketing will continue to be a priority for those who wish to remain competitive on the web. Some have claimed that SEO is dead, or that SEO amounts to spam. As we see it, there's no need for a defense other than simple logic: **websites compete for attention and placement in the search engines, and those with the knowledge and experience to improve their website's ranking will receive the benefits of increased traffic and visibility.**



CHAPTER FOUR

THE BASICS OF SEARCH ENGINE FRIENDLY DESIGN & DEVELOPMENT



Search engines are limited in how they crawl the web and interpret content. A webpage doesn't always look the same to you and me as it looks to a search engine. In this section, we'll focus on specific technical aspects of building (or modifying) web pages so they are structured for both search engines and human visitors alike. Share this part of the guide with your programmers, information architects, and designers, so that all parties involved in a site's construction are on the same page.

Indexable Content

To perform better in search engine listings, your most important content should be in HTML text format. Images, Flash files, Java applets, and other non-text content are often ignored or devalued by search engine crawlers, despite advances in crawling technology. The easiest way to ensure that the words and phrases you display to your visitors are visible to search engines is to place them in the HTML text on the page. However, more advanced methods are available for those who demand greater formatting or visual display styles:

- 1. Provide alt text for images.** Assign images in gif, jpg, or png format "alt attributes" in HTML to give search engines a text description of the visual content.
- 2. Supplement search boxes** with navigation and crawlable links.

- 3. Supplement Flash or Java plug-ins** with text on the page.
- 4. Provide a transcript for video and audio content** if the words and phrases used are meant to be indexed by the engines.



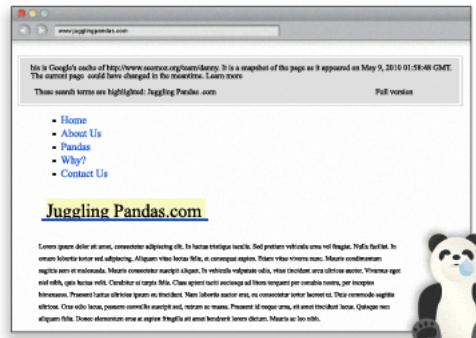
"I have a problem with getting found. I built a huge Flash site for juggling pandas and I'm not showing up anywhere on Google. What's up?"

Seeing your site as the search engines do

Many websites have significant problems with indexable content, so double-checking is worthwhile. By using tools like Google's cache, [SEO-browser.com](#), and the [MozBar](#) you can see what elements of your content are visible and indexable to the engines. Take a look at [Google's text cache of this page you are reading now](#). See how different it looks?



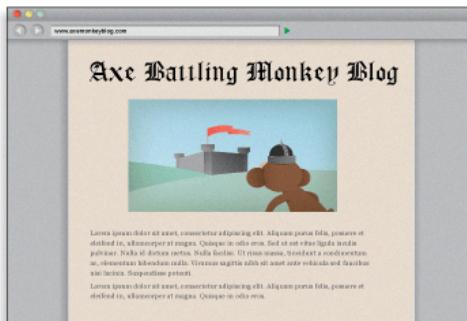
Through Browser



Through Google Cache

Whoa! That's what we look like?

Using the Google cache feature, we can see that to a search engine, JugglingPandas.com's homepage doesn't contain all the rich information that we see. This makes it difficult for search engines to interpret relevancy.



What Humans See



What Search Engines See

Hey, where did the fun go?

Uh oh ... via Google cache, we can see that the page is a barren wasteland. There's not even text telling us that the page contains the Axe Battling Monkeys. The site is built entirely in Flash, but sadly, this means that search engines cannot index any of the text content, or even the links to the individual games. Without any HTML text, this page would have a very hard time ranking in search results.

It's wise to not only check for text content but to also use SEO tools to double-check that the pages you're building are visible to the engines. This applies to your images, and as we see below, to your links as well.



Crawlable Link Structures

Just as search engines need to see content in order to list pages in their massive keyword-based indexes, they also need to see links in order to find the content in the first place. A crawlable link structure—one that lets the crawlers browse the pathways of a website—is vital to them finding all of the pages on a website. Hundreds of thousands of sites make the critical mistake of structuring their navigation in ways that search engines cannot access, hindering their ability to get pages listed in the search engines' indexes.

Below, we've illustrated how this problem can happen:



In the example above, Google's crawler has reached page A and

sees links to pages B and E. However, even though C and D might be important pages on the site, the crawler has no way to reach them (or even know they exist). This is because no direct, crawlable links point pages C and D. As far as Google can see, they don't exist! Great content, good keyword targeting, and smart marketing won't make any difference if the crawlers can't reach your pages in the first place.



ANATOMY OF A LINK

Jon Wye's Custom Designed Belts

start of link tag

link referral location

visible/anchor text of link

closure of link tag

Link tags can contain images, text, or other objects, all of which provide a clickable area on the page that users can engage to move to another page. These links are the original navigational elements of the Internet – known as hyperlinks. In the above illustration, the "<a>" tag indicates the start of a link. The link referral location tells the browser (and the search engines) where the link points. In this example, the URL <http://www.jonwye.com> is referenced. Next, the visible portion of the link for visitors, called **anchor text** in the SEO world, describes the page the link points to. The linked-to page is about custom belts made by Jon Wye, thus the anchor text "Jon Wye's Custom Designed Belts." The "" tag closes the link to constrain the linked text between the tags and prevent the link from encompassing other elements on the page.

This is the most basic format of a link, and it is eminently understandable to the search engines. The crawlers know that they should add this link to the engines' link graph of the web, use it to calculate query-independent variables (like Google's PageRank), and follow it to index the contents of the referenced page.

Let's look at some common reasons why pages may not be reachable.

Submission-required forms

If you require users to complete an online form before accessing certain content, chances are search engines will never see those protected pages. Forms can include a password-protected login or a full-blown survey. In either case, search crawlers generally will not attempt to submit forms, so any content or links that would be accessible via a form are invisible to the engines.

Links in unparseable JavaScript

If you use JavaScript for links, you may find that search engines

Robots don't use search forms

Although this relates directly to the above warning on forms, it's such a common problem that it bears mentioning. Some webmasters believe if they place a search box on their site, then engines will be able to find everything that visitors search for. Unfortunately, crawlers don't perform searches to find content, leaving millions of pages inaccessible and doomed to anonymity until a crawled page links to them.

Links in Flash, Java, and other plug-ins

either do not crawl or give very little weight to the links embedded within. Standard HTML links should replace JavaScript (or accompany it) on any page you'd like crawlers to crawl.

Links pointing to pages blocked by the Meta Robots tag or robots.txt

The [Meta Robots tag and the robots.txt](#) file both allow a site owner to restrict crawler access to a page. Just be warned that many a webmaster has unintentionally used these directives as an attempt to block access by rogue bots, only to discover that search engines cease their crawl.

Frames or iframes

Technically, links in both frames and iframes are crawlable, but both present structural issues for the engines in terms of organization and following. Unless you're an advanced user with a good technical understanding of how search engines index and follow links in frames, it's best to stay away from them.

The links embedded inside the Juggling Panda site (from our above example) are perfect illustrations of this phenomenon. Although dozens of pandas are listed and linked to on the page, no crawler can reach them through the site's link structure, rendering them invisible to the engines and hidden from users' search queries.

Links on pages with many hundreds or thousands of links

Search engines will only crawl so many links on a given page. This restriction is necessary to cut down on spam and conserve rankings. Pages with hundreds of links on them are at risk of not getting all of those links crawled and indexed.

If you avoid these pitfalls, you'll have clean, spiderable HTML links that will allow the spiders easy access to your content pages.

rel="nofollow"

Rel="nofollow" can be used with the following syntax:

`Lousy Punks!`

Links can have lots of attributes. The engines ignore nearly all of them, with the important exception of the rel="nofollow" attribute. In the example above, adding the rel="nofollow" attribute to the link tag tells the search engines that the site owners do not want this link to be interpreted as an endorsement of the target page.

Nofollow, taken literally, instructs search engines to not follow a link (although some do). Thenofollow tag came about as a method to help stop automated blog comment, guest book, and link injection spam ([read more about the launch here](#)), but has morphed over time into a way of telling the engines to discount any link value that would ordinarily be passed. Links tagged with nofollow are interpreted slightly differently by each of the engines, but it is clear they do not pass as much weight as normal links.

Are nofollow links bad?

Although they don't pass as much value as their followed cousins, nofollowed links are a natural part of a diverse link profile. A website with lots of inbound links will accumulate many nofollowed links, and this isn't a bad thing. In fact, Moz's [Ranking Factors](#) showed that high ranking sites tended to have a higher percentage of inbound nofollow links than lower-ranking sites.

Google

Google states that in most cases, they don't follow nofollow links, nor do these links transfer PageRank or anchor text values. Essentially, using nofollow causes Google to drop the target links from their overall graph of the web. Nofollow links carry no weight and are interpreted as HTML text (as though the link did not exist). That said, many webmasters believe that even a nofollow link from a high authority site, such as Wikipedia, could be interpreted as a sign of trust.

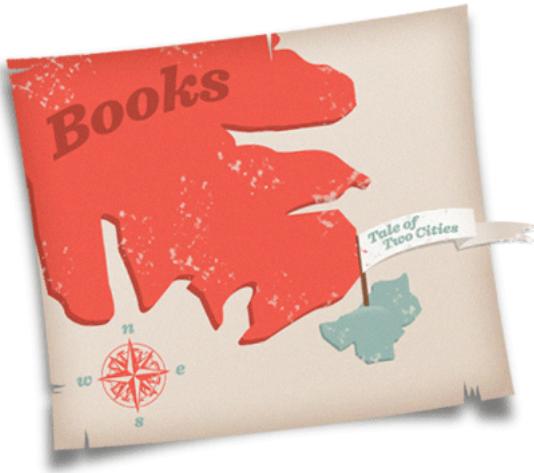
Bing & Yahoo!

Bing, which powers Yahoo search results, has also stated that they do not include nofollow links in the link graph, though their crawlers may still use nofollow links as a way to discover new pages. So while they may follow the links, they don't use them in rankings calculations.

Keyword Usage and Targeting

Keywords are fundamental to the search process. They are the building blocks of language and of search. In fact, the entire science of information retrieval (including web-based search engines like Google) is based on keywords. As the engines crawl and index the contents of pages around the web, they keep track of those pages in keyword-based indexes rather than storing 25 billion web pages all in one database. Millions and millions of smaller databases, each centered on a particular keyword term or phrase, allow the engines to retrieve the data they need in a mere fraction of a second.

Obviously, if you want your page to have a chance of ranking in the search results for "dog," it's wise to make sure the word "dog" is part of the crawlable content of your document.



Keyword Abuse

Since the dawn of online search, folks have abused keywords in a misguided effort to manipulate the engines. This involves "stuffing" keywords into text, URLs, meta tags, and links. Unfortunately, this tactic almost always does more harm than good for your site.

In the early days, search engines relied on keyword usage as a prime relevancy signal, regardless of how the keywords were actually used. Today, although search engines still can't read and comprehend text as well as a human, the use of machine learning has allowed them to get closer to this ideal.

The best practice is to use your keywords naturally and strategically (more on this below). If your page targets the keyword phrase "Eiffel Tower" then you might naturally include content about the Eiffel Tower itself, the history of the tower, or even recommended Paris hotels. On the other hand, if you simply sprinkle the words "Eiffel Tower" onto a page with irrelevant content, such as a page about dog breeding, then your efforts to rank for "Eiffel Tower" will be a long, uphill battle. **The point of using keywords is not to rank highly for all keywords, but to rank highly for the keywords that people are searching for when they want what your site provides.**

On-Page Optimization

Keyword usage and targeting are still a part of the search engines'

STEP 1: RECEIVE QUERY



STEP 2: FIND RELEVANT DATABASE



STEP 3: RANK DOCUMENTS



STEP 4: RETURN SEARCH RESULTS PAGE



Keyword Domination

Keywords dominate how we communicate our search intent and interact with the engines. When we enter words to search for, the engine matches pages to retrieve based on the words we entered. The order of the words ("pandas juggling" vs. "juggling pandas"), spelling, punctuation, and capitalization provide additional information that the engines use to help retrieve the right pages and rank them.

Search engines measure how keywords are used on pages to help determine the relevance of a particular document to a query. One of the best ways to optimize a page's rankings is to ensure that the keywords you want to rank for are prominently used in titles, text, and metadata.

Generally speaking, as you make your keywords more specific, you narrow the competition for search results, and improve your chances of achieving a higher ranking. The map graphic to the left compares the relevance of the broad term "books" to the specific title *Tale of Two Cities*. Notice that while there are a lot of results for the broad term, there are considerably fewer results (and thus, less competition) for the specific result.

Keyword Density Myth

Keyword density is not a part of modern ranking algorithms, as demonstrated by Dr. Edel Garcia in [The Keyword Density of Non-Sense](#).

If two documents, D1 and D2, consist of 1000 terms ($l = 1000$) and repeat a term 20 times ($tf = 20$), then a keyword density analyzer will tell you that for both documents Keyword Density (KD) $KD = 20/1000 = 0.020$ (or 2%) for that term. Identical values are obtained when $tf = 10$ and $l = 500$. Evidently, a keyword density analyzer does not establish which document is more relevant. A density analysis or keyword density ratio tells us nothing about:

- 1. The relative distance between keywords in documents (proximity)*
- 2. Where in a document the terms occur (distribution)*
- 3. The co-citation frequency between terms (co-occurrence)*
- 4. The main theme, topic, and sub-topics (on-topic issues) of the documents*

The Conclusion:

ranking algorithms, and we can apply some effective techniques for keyword usage to help create pages that are well-optimized. Here at Moz, we engage in a lot of testing and get to see a huge number of search results and **shifts based on keyword usage tactics**. When working with one of your own sites, this is the process we recommend. Use the keyword phrase:

- ⌘ In the title tag at least once. Try to keep the keyword phrase as close to the beginning of the title tag as possible. More detail on title tags follows later in this section.
- ⌘ Once prominently near the top of the page.
- ⌘ At least two or three times, including variations, in the body copy on the page. Perhaps a few more times if there's a lot of text content. You may find additional value in using the keyword or variations more than this, but in our experience adding more instances of a term or phrase tends to have little or no impact on rankings.
- ⌘ At least once in the alt attribute of an image on the page. This not only helps with web search, but also image search, which can occasionally bring valuable traffic.
- ⌘ Once in the URL. Additional rules for URLs and keywords are discussed later on in this section.
- ⌘ At least once in the meta description tag. Note that the meta description tag does not get used by the engines for rankings, but rather helps to attract clicks by searchers reading the results page, as the meta description becomes the snippet of text used by the search engines.

And you should generally *not* use keywords in link anchor text pointing to other pages on your site; this is known as **Keyword Cannibalization**.

Keyword density is divorced from content, quality, semantics, and relevance.

What should optimal page density look like then? An optimal page for the phrase "running shoes" would look something like:

PAGE TARGETING THE PHRASE "RUNNING SHOES"

TITLE: Running Shoes for Runners Who Love High Quality, Comfortable Shoes

H1 HEADER TAG: Find the Best Running Shoes to Fit Your Needs

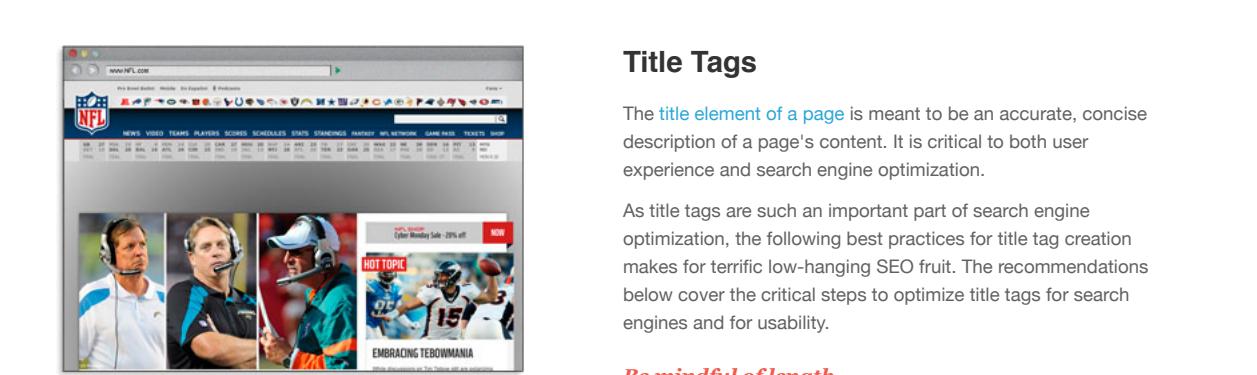


BODY COPY: Some compelling text about the benefits of choosing the right **running shoes**, finding the brands and sizes that fit your feet and how to compare **running shoes** in an easy-to-follow, logical fashion. This would also be a good place to describe how different **running shoes** apply to different activities like trail running, long distance running, sprinting, etc.

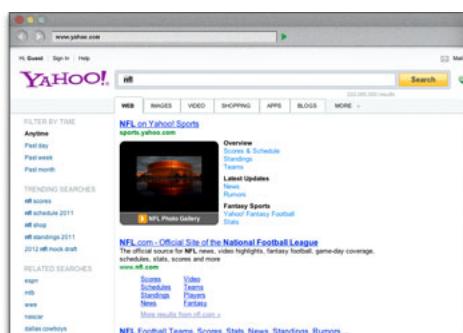
ALT ATTRIBUTE FOR PHOTO: The Famous **Running Shoes** of an Olympian

URL: <http://www.yourdomain.com/Running-Shoes>

You can read more information about On-Page Optimization in [this post](#).



The title tag of any page appears at the top of Internet browsing software, and is often used as the title when your content is shared through social media or republished.



Using keywords in the title tag means that search engines will bold those terms in the search results when a user has performed a

Title Tags

The **title element of a page** is meant to be an accurate, concise description of a page's content. It is critical to both user experience and search engine optimization.

As title tags are such an important part of search engine optimization, the following best practices for title tag creation makes for terrific low-hanging SEO fruit. The recommendations below cover the critical steps to optimize title tags for search engines and for usability.

Be mindful of length

Search engines display only the first 65-75 characters of a title tag in the search results (after that, the engines show an ellipsis – "...") – to indicate when a title tag has been cut off). This is also the general limit allowed by most social media sites, so sticking to this limit is generally wise. However, if you're targeting multiple keywords (or an especially long keyword phrase), and having them in the title tag is essential to ranking, it may be advisable to go longer.

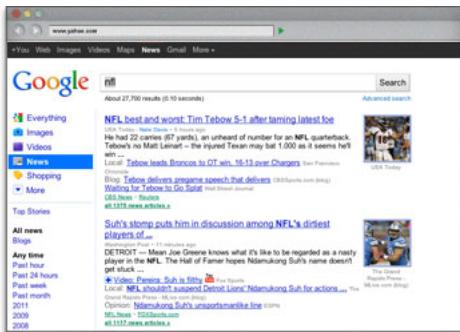
Place important keywords close to the front

The closer to the start of the title tag your keywords are, the more helpful they'll be for ranking, and the more likely a user will be to click them in the search results.

Include branding

At Moz, we love to end every title tag with a brand name mention, as these help to increase brand awareness, and create a higher click-through rate for people who like and are familiar with a brand. Sometimes it makes sense to place your brand at the beginning of

query with those terms. This helps garner a greater visibility and a higher click-through rate.



The final important reason to create descriptive, keyword-laden title tags is for ranking at the search engines. In Moz's biannual survey of SEO industry leaders, 94% of participants said that keyword use in the title tag was the most important place to use keywords to achieve high rankings.

the title tag, such as your homepage. Since words at the beginning of the title tag carry more weight, be mindful of what you are trying to rank for.

Consider readability and emotional impact

Title tags should be descriptive and readable. The title tag is a new visitor's first interaction with your brand and should convey the most positive impression possible. Creating a compelling title tag will help grab attention on the search results page, and attract more visitors to your site. This underscores that SEO is about not only optimization and strategic keyword usage, but the entire user experience.

Best Practices for Title Tags

Meta Tags

Meta tags were originally intended as a proxy for information about a website's content. Several of the basic meta tags are listed below, along with a description of their use.

Meta Robots

The **Meta Robots tag** can be used to control search engine crawler activity (for all of the major engines) on a per-page level. There are several ways to use Meta Robots to control how search engines treat a page:

index/noindex tells the engines whether the page should be crawled and kept in the engines' index for retrieval. If you opt to use "noindex," the page will be excluded from the index. By default, search engines assume they can index all pages, so using the "index" value is generally unnecessary.

follow/nofollow tells the engines whether links on the page should be crawled. If you elect to employ "nofollow," the engines will disregard the links on the page for discovery, ranking purposes, or both. By default, all pages are assumed to have the "follow" attribute.

Example: <META NAME="ROBOTS" CONTENT="NOINDEX, NOFOLLOW">

noarchive is used to restrict search engines from saving a cached copy of the page. By default, the engines will maintain visible copies of all pages they have indexed, accessible to searchers through the cached link in the search results.

nosnippet informs the engines that they should refrain from displaying a descriptive block of text next to the page's title and URL in the search results.

noodp/noydir are specialized tags telling the engines not to grab a descriptive snippet about a page from the Open Directory Project (DMOZ) or the Yahoo! Directory for display in the search results.

The **X-Robots-Tag** HTTP header directive also accomplishes these same objectives. This technique works especially well for content within non-HTML files, like images.

Meta Description

The **meta description** tag exists as a short description of a page's content. Search engines do not use the keywords or phrases in this tag for rankings, but meta descriptions are the primary source for the snippet of text displayed beneath a listing in the results.

The meta description tag serves the function of advertising copy, drawing readers to your site from the results. It is an extremely important part of search marketing. Crafting a readable, compelling description using important keywords (notice how Google bolds the searched keywords in the description) can draw a much higher click-through rate of searchers to your page.



META DESCRIPTION TAG

Meta descriptions can be any length, but search engines generally will cut snippets longer than 160 characters, so it's generally wise to stay within in these limits.

In the absence of meta descriptions, search engines will create the search snippet from other elements of the page. For pages that target multiple keywords and topics, this is a perfectly valid tactic.

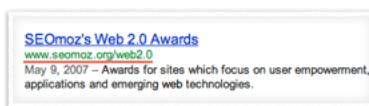
Not as important meta tags

Meta Keywords: The meta keywords tag had value at one time, but is no longer valuable or important to search engine optimization. For more on the history and a full account of why meta keywords has fallen into disuse, read [Meta Keywords Tag 101](#) from SearchEngineLand.

Meta Refresh, Meta Revisit-after, Meta Content-type, and others: Although these tags can have uses for search engine optimization, they are less critical to the process, and so we'll leave it to [Google's Webmaster Tools Help](#) to discuss in greater detail.

URL Structures

URLs—the addresses for documents on the web—are of great value from a search perspective. They appear in multiple important locations.



Since search engines display URLs in the results, they can impact click-through and visibility. URLs are also used in ranking documents, and those pages whose names include the queried search terms receive some benefit from proper, descriptive use of keywords.

URLs make an appearance in the web browser's address bar, and while this generally has little impact on search engines, poor URL structure and design can result in negative user experiences.

The URL above is used as the link anchor text pointing to the referenced page in this blog post.

URL Construction Guidelines

Employ empathy

Place yourself in the mind of a user and look at your URL. If you can easily and accurately predict the content you'd expect to find on the page, your URL is appropriately descriptive. You don't need to spell out every last detail in the URL, but a rough idea is a good starting point.

Shorter is better

While a descriptive URL is important, minimizing length and trailing slashes will make your URLs easier to copy and paste (into emails, blog posts, text messages, etc.) and will be fully visible in the search results.

Keyword use is important (but overuse is dangerous)

If your page is targeting a specific term or phrase, make sure to include it in the URL. However, don't go overboard by trying to stuff in multiple keywords for SEO purposes; overuse will result in less usable URLs and can trip spam filters.

Go static

The best URLs are human-readable and without lots of parameters, numbers, and symbols. Using technologies like mod_rewrite for Apache and ISAPI_rewrite for Microsoft, you can easily transform dynamic URLs like this <http://moz.com/blog?>



`id=123` into a more readable static version like this:

<http://moz.com/blog/google-fresh-factor>. Even single dynamic parameters in a URL can result in lower overall ranking and indexing.

Use hyphens to separate words

Not all web applications accurately interpret separators like underscores (_), plus signs (+), or spaces (%20), so instead use the hyphen character (-) to separate words in a URL, as in the "google-fresh-factor" URL example above.

Canonical and Duplicate Versions of Content

Duplicate content is one of the most vexing and troublesome problems any website can face. Over the past few years, search engines have cracked down on pages with thin or duplicate content by assigning them lower rankings.

Canonicalization happens when two or more duplicate versions of a webpage appear on different URLs. This is very common with modern Content Management Systems. For example, you might offer a regular version of a page and a print-optimized version. Duplicate content can even appear on multiple websites. For search engines, this presents a big problem: which version of this content should they show to searchers? In SEO circles, this issue is often referred to as **duplicate content**, described in greater detail here.

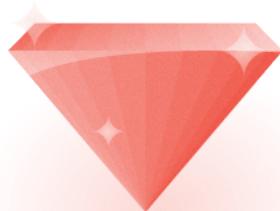


The engines are picky about duplicate versions of a single piece of material. To provide the best searcher experience, they will rarely show multiple, duplicate pieces of content, and instead choose which version is most likely to be the original. The end result is all of your duplicate content could rank lower than it should.

*Canonicalization is the practice of organizing your content in such a way that **every unique piece has one, and only one, URL**. If you leave multiple versions of content on a website (or websites), you might end up with a scenario like the one on the right: which diamond is the right one?*



*Instead, if the site owner took those three pages and **301 redirected** them, the search engines would have only one **strong** page to show in the listings from that site.*



When multiple pages with the potential to rank well are combined into a single page, they not only stop competing with each other, but also create a stronger relevancy and popularity signal overall. This will positively impact your ability to rank

well in the search engines.

Canonical Tag to the rescue!

A different option from the search engines, called the [Canonical URL Tag](#), is another way to reduce instances of duplicate content on a single site and canonicalize to an individual URL. This can also be used [across different websites](#), from one URL on one domain to a different URL on a different domain.

Use the canonical tag within the page that contains duplicate content. The target of the canonical tag points to the master URL that you want to rank for.



From an SEO perspective, the Canonical URL tag attribute is similar to a 301 redirect. In essence, you're telling the engines that multiple pages should be considered as one (which a 301 does), but without actually redirecting visitors to the new URL. This has the added bonus of saving your development staff considerable heartache.

For more about different types of duplicate content, [this post by Dr. Pete](#) deserves special mention.

Easy as pie!



Rich Snippets

Ever see a 5-star rating in a search result? Chances are, the search engine received that information from rich snippets embedded on the webpage. Rich snippets are a type of structured data that allow webmasters to mark up content in ways that provide information to the search engines.

While the use of rich snippets and structured data is not a required element of search engine-friendly design, its growing adoption means that webmasters who employ it may enjoy an advantage in some circumstances.

Structured data means adding markup to your content so that search engines can easily identify what type of content it is. Schema.org provides some examples of data that can benefit from structured markup, including people, products, reviews, businesses, recipes, and events.

Often the search engines include structured data in search results, such as in the case of user reviews (stars) and author profiles (pictures). There are several good resources for learning more

Rich Snippets in the Wild

Let's say you announce an SEO conference on your blog. In regular HTML, your code might look like this:

```
<div>  
SEO Conference<br/>  
Learn about SEO from experts in the field.<br/>  
Event date:<br/>  
May 8, 7:30pm  

```

Now, by structuring the data, we can tell the search engines more specific information about the type of data. The end result might look like this:

```
<div itemscope  
itemtype="http://schema.org/Event">  
<div itemprop="name">SEO Conference</div>
```

about rich snippets online, including [information at Schema.org](#) and Google's [Rich Snippet Testing Tool](#).

Learn about SEO from experts in the field.
Event date:
<time itemprop="startDate" datetime="2012-05-08T19:30">May 8, 7:30pm</time>
</div>

Defending Your Site's Honor

How scrapers steal your rankings

Unfortunately, the web is littered with unscrupulous websites whose business and traffic models depend on plucking content from other sites and re-using it (sometimes in strangely modified ways) on their own domains. This practice of fetching your content and re-publishing is called "scraping," and the scrapers perform remarkably well in search engine rankings, often outranking the original sites.

When you publish content in any type of feed format, such as RSS or XML, make sure to ping the major blogging and tracking services (Google, Technorati, Yahoo!, etc.). You can find instructions for pinging services like Google and Technorati directly from their sites, or use a service like [Pingomatic](#) to automate the process. If your publishing software is custom-built, it's typically wise for the developer(s) to include auto-pinging upon publishing.

Next, you can use the scrapers' laziness against them. Most of the scrapers on the web will re-publish content without editing. So, by including links back to your site, and to the specific post you've authored, you can ensure that the search engines see most of the copies linking back to you (indicating that your source is probably the originator). To do this, you'll need to use absolute, rather than relative links in your internal linking structure. Thus, rather than linking to your home page using:

Home

You would instead use:

Home

This way, when a scraper picks up and copies the content, the link remains pointing to your site.

There are more advanced ways to protect against scraping, but none of them are entirely foolproof. You should expect that the more popular and visible your site gets, the more often you'll find your content scraped and re-published. Many times, you can ignore this problem: but if it gets very severe, and you find the scrapers taking away your rankings and traffic, you might consider using a legal process called a DMCA takedown. Moz CEO Sarah Bird offers some quality advice on this topic: [Four Ways to Enforce Your Copyright: What to Do When Your Online Content is Being Stolen](#).



CHAPTER FIVE

KEYWORD RESEARCH



It all begins with words typed into a search box.

Keyword research is one of the most important, valuable, and high return activities in the search marketing field. Ranking for the right keywords can make or break your website. By researching your market's keyword demand, you can not only learn which terms and phrases to target with SEO, but also learn more about your customers as a whole.

It's not always about getting visitors to your site, **but about getting the right kind of visitors**. The usefulness of this intelligence cannot be overstated; with keyword research you can predict shifts in demand, respond to changing market conditions, and produce the products, services, and content that web searchers are actively seeking. In the history of marketing, there has never been such a low barrier to entry in understanding the motivations of consumers in virtually any niche.

How to Judge the Value of a Keyword

How much is a keyword worth to your website? If you own an online shoe store, do you make more sales from visitors searching for "brown shoes" or "black boots"? The keywords visitors type into search engines are often available to webmasters, and keyword research tools allow us to find this information. However, those tools cannot show us directly how valuable it is to receive traffic from those searches. To understand the value of a keyword, we need to understand our own websites, make some hypotheses, test, and repeat—the classic web marketing formula.

A basic process for assessing a keyword's value

Ask yourself...

Is the keyword relevant to your website's content? Will searchers find what they are looking for on your site when they search using these keywords? Will they be happy with what they find? Will this traffic result in financial rewards or other organizational goals? If the answer to all of these questions is a clear "Yes!" then proceed ...

Search for the term/phrase in the major engines

Understanding which websites already rank for your keyword gives you valuable insight into the competition, and also how hard it will be to rank for the given term. Are there search advertisements running along the top and right-hand side of the organic results? Typically, many search ads means a high-value keyword, and



Even the best estimates of value fall flat against the hands-on process of optimizing and calculating ROI. Search engine optimization involves constant testing, experimenting, and improvement. Remember, even though SEO is typically one of the highest return

multiple search ads above the organic results often means a highly lucrative and directly conversion-prone keyword.

Buy a sample campaign for the keyword at Google AdWords and/or Bing Adcenter

If your website doesn't rank for the keyword, you can nonetheless buy test traffic to see how well it converts. In Google Adwords, choose "exact match" and point the traffic to the relevant page on your website. Track impressions and conversion rate over the course of at least 200-300 clicks.

Using the data you've collected, determine the exact value of each keyword

For example, assume your search ad generated 5,000 impressions in one day, of which 100 visitors have come to your site, and three have converted for a total profit (not revenue!) of \$300. In this case, a single visitor for that keyword is worth \$3 to your business. Those 5,000 impressions in 24 hours could generate a click-through rate of between 18-36% with a #1 ranking (see the [Slingshot SEO study](#) for more on potential click-through rates), which would mean 900-1800 visits per day, at \$3 each, or between **1 and 2 million dollars per year**.

No wonder businesses love search marketing!

marketing investments, measuring success is still critical to the process.

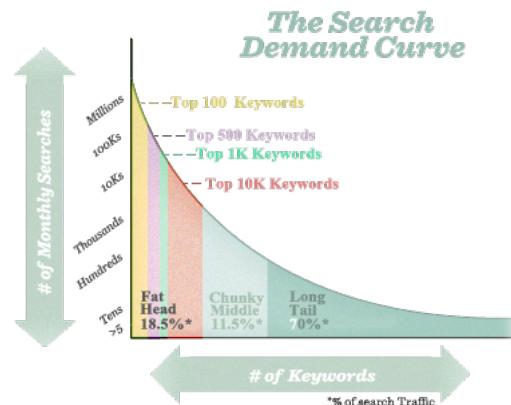
Understanding the Long Tail of Keyword Demand

Going back to our online shoe store example, it would be great to rank #1 for the keyword "shoes" ... or would it?

It's wonderful to deal with keywords that have 5,000 searches a day, or even 500 searches a day, but in reality, these popular search terms actually make up less than 30% of the searches performed on the web. The remaining 70% lie in what's called the "long tail" of search. The long tail contains hundreds of millions of unique searches that might be conducted a few times in any given day, but, when taken together, comprise the majority of the world's search volume.

Another lesson search marketers have learned is that long tail keywords often convert better, because they catch people later in the buying/conversion cycle. A person searching for "shoes" is probably browsing, and not ready to buy. On the other hand, someone searching for "best price on Air Jordan size 12" practically has their wallet out!

Understanding the search demand curve is critical. To the right we've included a sample keyword demand curve, illustrating the small number of queries sending larger amounts of traffic alongside the volume of less-searched terms and phrases that bring the bulk of our search referrals.





“Ignore the long tail at your peril - search marketing and web site content strategies must allow for this “impossible to predict” form of visits or risk losing out to a more expository and prolific competitor.”

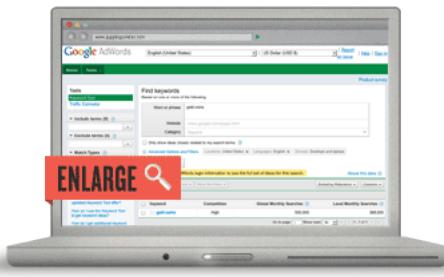


Keyword Research

Resources

Where do we get all of this knowledge about keyword demand and keyword referrals? From research sources like these:

- ★ [Google AdWords Keyword Planner Tool](#)
- ★ [Google Trends](#)
- ★ [Microsoft Bing Ads Intelligence](#)
- ★ [Wordtracker's Free Basic Keyword Demand](#)



Google's AdWords Keyword Tool provides suggested keyword and volume data.

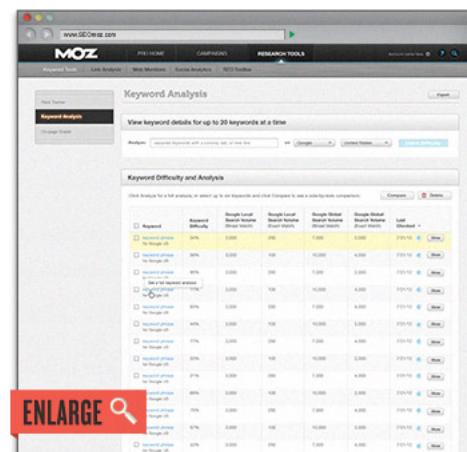
Google's AdWords Keyword Planner tool is a common starting point for SEO keyword research. It not only suggests keywords and provides estimated search volume, but also predicts the cost of running paid campaigns for these terms. To determine volume for a particular keyword, be sure to set the Match Type to [Exact] and look under Local Monthly Searches. Remember that these represent total searches. Depending on your ranking and click-through rate, the actual number of visitors you achieve for these keywords will usually be much lower.

Other sources for keyword information exist, as do tools with more advanced data. The Moz blog category on [Keyword Research](#) is an excellent place to start.

Keyword Difficulty

What are my chances of success?

In order to know which keywords to target, it's essential to not only understand the **demand** for a given term or phrase, but also the **work required** to achieve high rankings. If big brands take the top 10 results and you're just starting out on the web, the uphill battle for rankings can take years of effort. This is why it's essential to understand keyword difficulty.



Different tools around the web help provide this information. One of these, Moz's own [Keyword Analysis Tool](#) does a good job collecting all of these metrics and providing a comparative score for any given search term or phrase.

CHAPTER SIX

HOW USABILITY, USER EXPERIENCE & CONTENT AFFECT SEARCH ENGINE RANKINGS



The search engines constantly strive to improve their performance by providing the best possible results. While "best" is subjective, the engines have a very good idea of the kinds of pages and sites that satisfy their searchers. Generally, these sites have several traits in common:

- 1 **Easy to use, navigate, and understand**
- 2 **Provide direct, actionable information relevant to the query**
- 3 **Professionally designed and accessible to modern browsers**
- 4 **Deliver high quality, legitimate, credible content**



Despite amazing technological advances, search engines can't yet understand text, view images, or watch video the same way a human can. In order to decipher and rank content they rely on meta information (not necessarily meta tags) about how people interact with sites and pages, and this gives them insight into the quality of the pages themselves.

The Impact of Usability and User Experience

On search engine rankings

There are a limited number of variables that search engines can take into account directly, including keywords, links, and site structure. However, through linking patterns, user engagement metrics, and machine learning, the engines make a considerable number of intuitions about a given site. Usability and user experience are second order influences on search engine ranking success. They provide an indirect but measurable benefit to a site's external popularity, which the engines can then interpret as a signal of higher quality. This is called the "**no one likes to link to a crummy site**" phenomenon.

Crafting a thoughtful, empathetic user experience helps ensure that visitors to your site perceive it positively, encouraging sharing, bookmarking, return visits, and inbound links—all signals that trickle down to the search engines and contribute to high rankings.

Signals of Quality Content

1. Engagement Metrics

When a search engine delivers a page of results to you, it can measure the success of the rankings by observing how you engage with those results. If you click the first link, then immediately hit the back button to try the second link, this indicates that you were not satisfied with the first result. Search engines seek the "long click" – where users click a result without immediately returning to the search page to try again. Taken in aggregate over millions and millions of queries each day, the engines build up a good pool of data to judge the quality of their results.

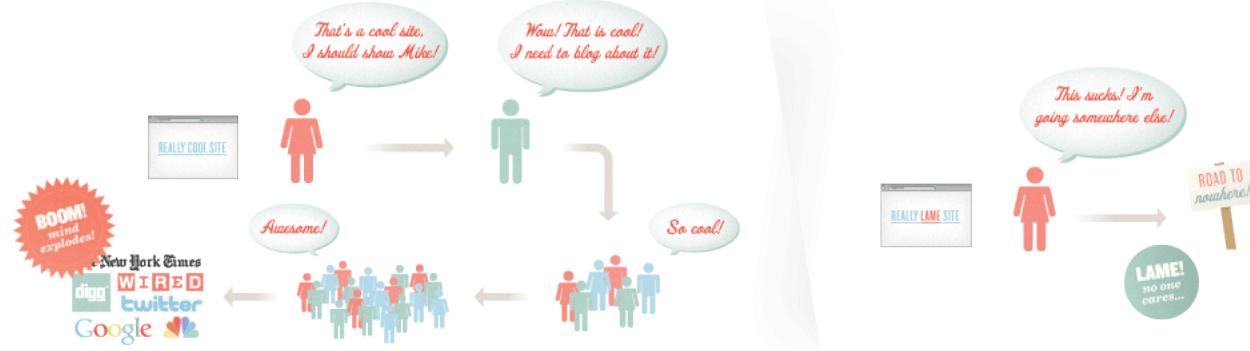
2. Machine Learning

In 2011 Google introduced the [Panda update](#) to its ranking algorithm, significantly changing the way it judged websites for quality. Google started by using human evaluators to manually

rate thousands of sites, searching for low quality content. Google then incorporated machine learning to mimic the human evaluators. Once its computers could accurately predict what the humans would judge a low quality site, the algorithm was introduced across millions of sites spanning the Internet. The end result was a seismic shift that rearranged over 20% of all of Google's search results. For more on the Panda update, some good resources can be found [here](#) and [here](#).

3. Linking Patterns

The engines discovered early on that the link structure of the web could serve as a proxy for votes and popularity; higher quality sites and information earned more links than their less useful, lower quality peers. Today, link analysis algorithms have advanced considerably, but these principles hold true.



All of that positive attention and excitement around the content offered by the new site translates into a machine-parseable (and algorithmically-valuable) collection of links. The timing, source, anchor text, and number of links to the new site are all factored into its potential performance (i.e., ranking) for relevant queries at the engines.

Now imagine that site wasn't so great—let's say it's just an ordinary site without anything unique or impressive.

Crafting Content

For search engine success

"Develop great content" may be the most oft-repeated suggestion in the SEO world. Despite its clichéd status, though, this is sound advice. Appealing, useful content is crucial to search engine optimization. Every search performed at the engines comes with an intent—to find, learn, solve, buy, fix, treat, or understand. Search engines place web pages in their results in order to satisfy that intent in the best possible way. Crafting fulfilling, thorough content that addresses searchers' needs improved your chance to earn top rankings.

Search Intent Flavors

Search intent comes in a variety of flavors ...



I gotta find a Greek place nearby; my Mom's favorite!



bing

Web Images Video Local Shopping More

GREEK RESTAURANT IN FLEMINGTON, NJ

Transactional Searches

Identifying a local business, making a purchase online, or completing a task.

Transactional searches don't necessarily involve a credit card or wire transfer. Signing up for a free trial account at Cook's Illustrated, creating a Gmail account, or finding the best local Mexican cuisine (in Seattle it's Carta de Oaxaca) are all transactional queries.

Navigational Searches

Visiting a pre-determined destination or sourcing a specific URL.

Navigational searches are performed with the intent of surfing directly to a specific website. In some cases, the user may not know the exact URL, and the search engine serves as the White Pages.

What was the name of that actor from "Firefly"?



Ask.com

Web Images Video Local Shopping More

ACTOR WHO PLAYED WASH FROM FIREFLY

Informational Searches

Researching non-transactional information, getting quick answers, or ego-searching.

Informational searches involve a huge range of queries from finding out the local weather to getting maps and directions to finding out how long that trip to Mars really takes (about eight months). The common thread here is that the searches are primarily non-commercial and non-transaction-oriented in nature; the information itself is the goal, and no interaction beyond clicking and reading is required.

Fulfilling these intents is up to you. Creativity, high-quality writing, use of examples, and inclusion of images and multimedia can all help in crafting content that perfectly matches a searcher's goals. Your reward is satisfied searchers who demonstrate their positive experience through engagement with your site or with links to it.

CHAPTER SEVEN

GROWING POPULARITY & LINKS



For search engines that crawl the vast metropolis of the web, links are the streets between pages. Using sophisticated link analysis, the engines can discover how pages are related to each other and in what ways.

Since the late 1990s search engines have treated links as votes for popularity and importance in the ongoing democratic opinion poll of the web. The engines themselves have refined the use of link data to a fine art, and use complex algorithms to perform nuanced evaluations of sites and pages based on this information.

Links aren't everything in SEO, but search professionals attribute a large portion of the engines' algorithms to link-related factors (see [Search Engine Ranking Factors](#)). Through links, engines can not only analyze the popularity websites and pages based on the number and popularity of pages linking to them, but also metrics like trust, spam, and authority. Trustworthy sites tend to link to other trusted sites, while spammy sites receive very few links from trusted sources (see [MozTrust](#)). Authority models, like those postulated in the [Hilltop Algorithm](#), suggest that links are a very good way of identifying expert documents on a given subject.

Thanks to this focus on algorithmic use and analysis of links, growing the link profile of a website is critical to gaining traction, attention, and traffic from the engines. As an SEO, link building is among the top tasks required for search ranking and traffic success.



Link Signals

Used by search engines

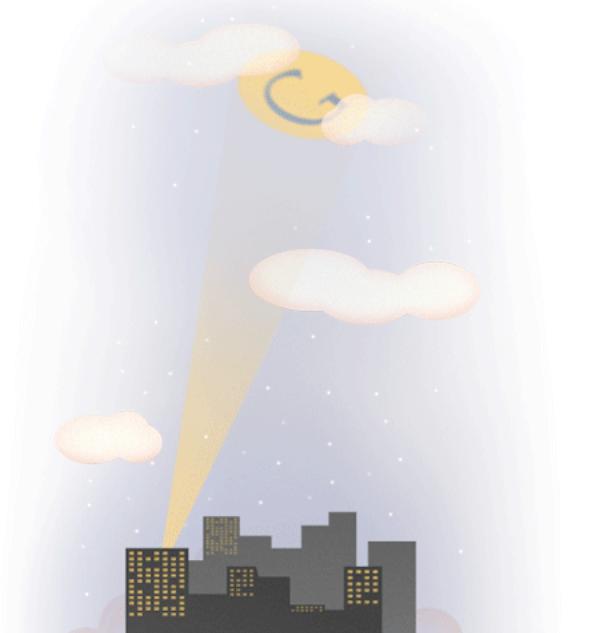
How do search engines assign value to links? To answer this, we need to explore the individual elements of a link, and look at how the search engines assess these elements. We don't fully understand the proprietary metrics that search engines use, but through analysis of patent applications, years of experience, and hands-on testing, we can draw some intelligent assumptions that hold up in the real world. Below is a list of notable factors worthy of consideration. These signals, and many more, are considered by professional SEOs when measuring link value and a site's link profile. You may also enjoy some further on the Moz Blog reading about [search engine valuation of links](#).

Global Popularity

The more popular and important a site is, the more links from that site matter. A site like [Wikipedia](#) has thousands of diverse sites linking to it, which means it's probably a popular and important site. To earn trust and authority with the engines, you'll need the help of other link partners. The more popular, the better.

Local/Topic-Specific Popularity

The concept of "local" popularity, first pioneered by the Teoma



search engine, suggests that links from sites within a topic-specific community matter more than links from general or off-topic sites. For example, if your website sells dog houses, a link from the Society of Dog Breeders matters much more than one from a site about roller skating.

Anchor Text

One of the strongest signals the engines use in rankings is **anchor text**. If dozens of links point to a page with the right keywords, that page has a very good probability of ranking well for the targeted phrase in that anchor text. You can see examples of this in action with searches like "[click here](#)," where many results rank solely due to the anchor text of inbound links.

TrustRank

It's no surprise that the Internet contains massive amounts of spam. Some estimate as much as 60% of the web's pages are spam. In order to weed out this irrelevant content, search engines use systems for measuring trust, many of which are based on the link graph. Earning links from highly-trusted domains can result in a significant boost to this scoring metric. Universities, government websites and non-profit organizations represent examples of high-trust domains.

Link Neighborhood

Spam links often go both ways. A website that links to spam is likely spam itself, and in turn often has many spam sites linking back to it. By looking at these links in the aggregate, search engines can understand the "link neighborhood" in which your website exists. Thus, it's wise to choose those sites you link to carefully and be equally selective with the sites you attempt to earn links from.

Freshness

Link signals tend to decay over time. Sites that were once popular often go stale, and eventually fail to earn new links. Thus, it's important to continue earning additional links over time. Commonly referred to as "[FreshRank](#)," search engines use the freshness signals of links to judge current popularity and relevance.

Social Sharing

The last few years have seen an explosion in the amount of content shared through social services such as Facebook, Twitter, and Google+. Although search engines treat socially shared links differently than other types of links, they notice them nonetheless. There is much debate among search professionals as to how exactly search engines factor social link signals into their algorithms, but there is no denying the rising importance of social channels.



THE CONCEPT OF TRURANK



Search researchers found that the further a site/page's distance from a trusted seed set, the more likely they were to contain spam results.

The Power of Social Sharing

How Google+, Twitter, and Facebook Change the Game

The years 2011–2012 saw a huge rise in social sharing and its effects on search. Google, in particular, began to incorporate a huge number of social signals into its search results. This involves serving personalized results to logged-in users that include content shared by the searcher's social circle (Facebook, Twitter and others). These results might not always appear in the top ten, but are undoubtedly promoted due to this social influence.

The potential power of this shift towards social for search marketers is huge. Someone with a large social circle, who shares a lot of material, is more likely to see that material (and her face) promoted in search results. For publishers, it's beneficial to have your content shared by these highly influential folks with large social followings. For Google searches, this is especially true of content shared on Google+.

Are Social Shares the Same as Links?

In a word: no. Although there is evidence that social shares such as Tweets, Likes, and Plusses affect rankings, at this time links are considered a far superior and more lasting way to promote the popularity of your content than any other method.

Link Building Basics

Link building is an art. It's almost always the most challenging part of an SEO's job, but also the one most critical to success. Link building requires creativity, hustle, and often, a budget. No two link building campaigns are the same, and the way you choose to build links depends as much upon your website as it does your personality. Below are three basic types of link acquisition.



1 "Natural" Editorial Links

Links that are given naturally by sites and pages that want to link to your content or company. These links require no specific action from the SEO, other than the creation of worthy material (great content) and the ability to create awareness about it.

2 Manual "Outreach" Link Building

The SEO creates these links by emailing bloggers for links, submitting sites to directories, or paying for listings of any kind. The SEO often creates a value proposition by explaining to the link target why creating the link is in their best interest. Examples include filling out forms for submissions to a website award program or convincing a professor that your resource is worthy of inclusion on the public syllabus.

3 Self-Created, Non-Editorial

Hundreds of thousands of websites offer any visitor the opportunity to create links through guest book signings, forum signatures, blog comments, or user profiles. These links offer the lowest value, but can, in the aggregate, still have an impact for some sites. In general, search engines continue to devalue most of these types of links, and have been known to penalize sites that pursue these links aggressively. Today, these types of links are often considered spammy and should be pursued with caution.

It's up to you, as an SEO, to select which of these will have the highest return on the effort invested. As a general rule, it's wise to build as vast and varied a link profile as possible, as this brings the best search engine results. Any link building pattern that appears non-standard, unnatural, or manipulative will eventually become a target for advancing search algorithms to discount.

STARTING *a Link Building Campaign*



As with any marketing activity, the first step in any link building campaign is the creation of goals and strategies. Unfortunately, link building is one of the most difficult activities to measure. Although the engines internally weigh each link with precise, mathematical metrics, it's impossible for those on the outside to access this information.

SEOs rely on a number of signals to help build a rating scale of link value. Along with the data from the link signals mentioned above, these metrics include the following:

Ranking for Relevant Search Terms

One of the best ways to determine how highly a search engine values a given page is to search for some of the keywords and phrases that page targets (particularly those in the [title tag](#) and [headline](#)). For example, if you are trying to rank for the phrase "dog kennel," earning links from pages that already rank for this phrase would help significantly.

MozRank

[MozRank](#) (mR) shows how popular a given web page is on the web. Pages with high MozRank scores tend to rank better. The more links to a given page, the more popular it becomes. Links from important pages (like [www.cnn.com](#) or [www.irs.gov](#)) increase a page's popularity, and subsequently its MozRank, more than unpopular websites.

A page's MozRank can be improved by getting lots of links from semi-popular pages, or a few links from very popular pages.

Domain Authority

[Moz Domain Authority](#) (or DA) is a query-independent measure of how likely a domain is to rank for any given query. DA is calculated by analyzing the Internet's domain graph and comparing a given domain to tens of thousands of queries in Google.

Competitor's Backlinks

By examining the backlinks (inbound links) of a website that already ranks well for your targeted keyword phrase, you gain valuable intelligence about the links that help them achieve this ranking. Using tools like [Open Site Explorer](#), SEOs can discover these links and target these domains in their own link building campaigns.

Number of Links on a Page

According to the [original PageRank formula](#), the value that a link passes is diluted by the presence of other links on a page. Thus, all other things being equal, being linked to by a page with few links is better than being linked to by a page with many links. The degree to which this is relevant is unknowable (in our testing, it appears to be important, but not overwhelmingly so), but it's certainly something to be aware of as you conduct your link acquisition campaign.

Potential Referral Traffic

Link building should never be solely about search engines. Links that send high amounts of direct click-through traffic not only tend to provide better search engine value for rankings, but also send targeted, valuable visitors to your site (the basic goal of all Internet marketing). This is something you can estimate based on the numbers of visits or page views according to site analytics. If you can't get access to these, services like [Google Trends](#) can give you a rough idea of at least domain-wide traffic, although these estimates are known to be wildly inaccurate at times.

It takes time, practice, and experience to build comfort with these variables as they relate to search engine traffic. However, using your websites analytics, you should be able to determine whether your campaign is successful.

Success comes when you see increases in search traffic, higher rankings, more frequent search engine crawling and increases in referring link traffic. If these metrics do not rise after a successful link building campaign, it's possible you either need to seek better quality link targets, or improve your [on-page optimization](#).

Five Samples of Link Building Strategies

Get your customers to link to you

If you have partners you work with regularly, or loyal customers that love your brand, you can capitalize on this by sending out partnership badges—graphic icons that link back to your site (like Google often does with their AdWords certification program). Just as you'd get customers wearing your t-shirts or sporting your bumper stickers, links are the best way to accomplish the same feat on the web. Check out [this post on e-commerce links](#) for more.

Build a company blog; make it a valuable, informative, and entertaining resource

This content and link building strategy is so popular and valuable that it's one of the few recommended personally by the engineers at Google (for more on this, see articles at [USA Today](#) and [Stone Temple](#)). Blogs have the unique ability to contribute fresh material on a consistent basis, participate in conversations across the web, and earn listings and links from other blogs, including blogrolls and blog directories.

The link building activities you engage in depend largely on the type of site you're working with.

For smaller sites, manual link building, including directories, link requests, and link exchanges may be a part of the equation. With larger sites, these tactics tend to fall flat and more scalable solutions are required. Sample strategies are listed here, though this is by no means an exhaustive list (see [Moz's Blog Posts on Link Building](#) for more).

Search for sites like yours by using keywords and phrases directly

Create content that inspires viral sharing and natural linking

In the SEO world, we often call this "linkbait." Good examples might include David Mihm's [Local Search Ranking Factors](#), [Compare the Meerkat](#), or the funny [How Not To Clean a Window](#). Each leverages aspects of usefulness, information dissemination, or humor to create a viral effect. Users who see it once want to share it with friends, and bloggers/tech-savvy webmasters who see it will often do so through links. Such high quality, editorially earned votes are invaluable to building trust, authority, and rankings potential.

Be newsworthy

Earning the attention of the press, bloggers and news media is an effective, time-honored way to earn links. Sometimes this is as simple as [giving away something for free](#), releasing a great new product, or stating something controversial.

relevant to your business. When you locate sites that aren't directly competitive, email them, use their online forms, call them on the phone, or even send them a letter by mail to start a conversation about getting a link. Check out [this blog post on link requests](#) for more detail.



Show Me the Money

An aside on buying links

Google and Bing seek to discount the influence of paid links in their organic search results. While it is impossible for them to detect and discredit all paid links, the search engines put a lot of time and resources into finding ways to detect these. Websites caught buying links or participating in link schemes risk severe penalties that will drop their rankings into oblivion. Notwithstanding these efforts, link buying sometimes works; many search professionals wish the search engines would do even more to discourage it.

We at Moz [recommend](#) spending your time on long-term link building strategies that focus on building links naturally.



CHAPTER EIGHT

8

SEARCH ENGINE TOOLS AND SERVICES



SEOs tend to use a lot of tools. Some of the most useful are provided by the search engines themselves. Search engines want webmasters to create sites and content in accessible ways, so they provide a variety of tools, analytics and guidance. These free resources provide data points and unique opportunities for exchanging information with the engines.

Below we explain the common elements that each of the major search engines support and identify why they are useful.

Common Search Engine Protocols

1. Sitemaps

Think of a sitemap as a list of files that give hints to the search engines on how they can crawl your website. Sitemaps help search engines find and classify content on your site that they may not have found on their own. Sitemaps also come in a variety of formats and can highlight many different types of content, including video, images, news, and mobile.

You can read the full details of the protocols at [Sitemaps.org](#). In addition, you can build your own sitemaps at [XML-Sitemaps.com](#). Sitemaps come in three varieties:

XML

Extensible Markup Language (recommended format)

pro This is the most widely accepted format for sitemaps. It is extremely easy for search engines to parse and can be produced by a plethora of sitemap generators. Additionally, it allows for the most granular control of page parameters.

con Relatively large file sizes. Since XML requires an open tag and a close tag around each element, file sizes can get very large.



RSS

Really Simple Syndication or Rich Site Summary

pro Easy to maintain. RSS sitemaps can easily be coded to automatically update when new content is added.

con Harder to manage. Although RSS is a dialect of XML, it is actually much harder to manage due to its updating properties.

Txt

Text File

pro Extremely easy. The text sitemap format is one URL per line up to 50,000 lines.

con Does not provide the ability to add meta data to pages.

2. Robots.txt

The robots.txt file, a product of the [Robots Exclusion Protocol](#), is a file stored on a website's root directory (e.g., www.google.com/robots.txt). The robots.txt file gives instructions to automated web crawlers visiting your site, including search crawlers.

By using robots.txt, webmasters can indicate to search engines which areas of a site they would like to disallow bots from crawling, as well as indicate the locations of sitemap files and crawl-delay parameters. You can read more details about this at the [robots.txt](#) Knowledge Center page.

The following commands are available:

Disallow

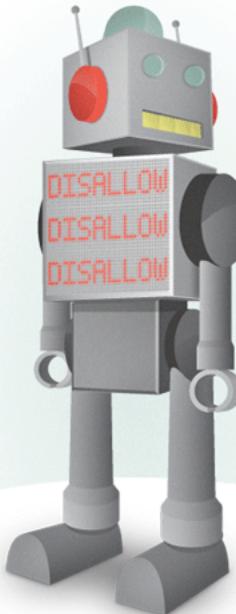
Prevents compliant robots from accessing specific pages or folders.

Sitemap

Indicates the location of a website's sitemap or sitemaps.

Crawl Delay

Indicates the speed (in milliseconds) at which a robot can crawl a server.



An Example of Robots.txt

```
#Robots.txt www.example.com/robots.txt
User-agent: *
Disallow:

# Don't allow spambot to crawl any pages
User-agent: spambot
Disallow: /

sitemap:www.example.com/sitemap.xml
```

Warning: Not all web robots follow robots.txt. People with bad intentions (e.g., e-mail address scrapers) build bots that don't follow this protocol; and in extreme cases they can use it to identify the location of private information. For this reason, it is recommended that the location of administration sections and other private sections of publicly accessible websites not be included in the robots.txt file. Instead, these pages can utilize the meta robots tag (discussed next) to keep the major search engines from indexing their high-risk content.

3. Meta Robots

The meta robots tag creates page-level instructions for search engine bots.

The meta robots tag should be included in the head section of the HTML document.

An Example of Meta Robots

```
<html>
<head>
<title>The Best Webpage on the Internet</title>
<meta name="ROBOTS" content="NOINDEX,
NOFOLLOW">
</head>
```

```

<body>
  <h1>Hello World</h1>
</body>
</html>

```

In the example above, “NOINDEX, NOFOLLOW” tells robots not to include the given page in their indexes, and also not to follow any of the links on the page.

ROBOTS META TAG

<meta name = "ROBOT NAME" content = "ARGUMENTS" />

ROBOT NAME can be either “robots” for all robots or the user-agent of a specific robot. See robot use-agent list to the left.

ARGUMENTS

noindex	Google, Yahoo, Live, Ask	Page not indexed
nofollow	Google, Yahoo, Live, Ask	All links on page become nofollowed
nocache	Google, Yahoo, Live, Ask	Page not cached
noodp	Google, Yahoo, Live	Stops description and title tag overwrite by DMOZ (only for Homepage)
noydir	Yahoo	Stops description and title tag overwrite by Yahoo Directory
nosnippet	Google	Stops Google from generating description based on on-page text



4. Rel="Nofollow"

Remember how [links act as votes](#)? The rel=nofollow attribute allows you to link to a resource, while removing your “vote” for search engine purposes. Literally, “nofollow” tells search engines not to follow the link, although some engines still follow them to discover new pages. These links certainly pass less value (and in most cases no juice) than their followed counterparts, but are useful in various situations where you link to an untrusted source.

An Example ofnofollow

```

<a href="http://www.example.com" title="Example"
rel="nofollow">Example Link</a>

```

In the example above, the value of the link would not be passed to example.com as the rel=nofollow attribute has been added.

5. Rel="canonical"

Often, two or more copies of the exact same content appear on your website under different URLs. For example, the following URLs can all refer to a single homepage:

- * <http://www.example.com/>
- * <http://www.example.com/default.asp>
- * <http://example.com/>
- * <http://example.com/default.asp>
- * <http://Example.com/Default.asp>

To search engines, these appear as five separate pages. Because the content is identical on each page, this can cause the search engines to devalue the content and its potential rankings.

The canonical tag solves this problem by telling search robots which page is the singular, authoritative version that should count in web results.

An Example of rel="canonical" for the URL

<http://example.com/default.asp>

```

<html>
  <head>
    <title>The Best Webpage on the Internet</title>
    <link rel="canonical"
      href="http://www.example.com">
  </head>
  <body>
    <h1>Hello World</h1>
  </body>
</html>

```

In the example above, rel=canonical tells robots that this page is a copy of <http://www.example.com>, and should consider the latter URL as the canonical and authoritative

one.

Search Engine Tools

Google Webmaster Tools

Google Webmaster Tools

Key Features

Geographic Target - If a given site targets users in a particular location, webmasters can provide Google with information that will help determine how that site appears in its country-specific search results, and also improve Google search results for geographic queries.

Preferred Domain - The preferred domain is the one that a webmaster would like used to index their site's pages. If a webmaster specifies a preferred domain as <http://www.example.com> and Google finds a link to that site that is formatted as <http://example.com>, Google will treat that link as if it were pointing at <http://www.example.com>.

URL Parameters - You can indicate to Google information about each parameter on your site, such as "`sort=price`" and "`sessionid=2`". This helps Google crawl your site more efficiently.

Crawl Rate - The crawl rate affects the speed (but not the frequency) of Googlebot's requests during the crawl process.

Malware - Google will inform you if it has found any malware on your site. Malware creates a bad user experience, and hurts your rankings.

Crawl Errors - If Googlebot encounters significant errors while crawling your site, such as 404s, it will report these.

HTML Suggestions - Google looks for search engine-unfriendly HTML elements such as issues with meta descriptions and title tags.

Sign Up



Your Site on the Web

Statistics provided by search engine tools offer unique insight to SEOs, like keyword impressions, click-through rates, top pages delivered in search results, and linking statistics.

Site Configuration

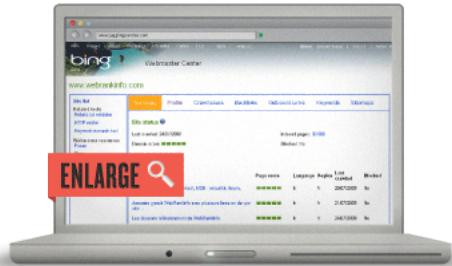
This important section allows you to submit sitemaps, test robots.txt files, adjust [sitelinks](#), and submit change of address requests when you move your website from one domain to another. This area also contains the Settings and URL parameters sections discussed in the previous column.

+1 Metrics

When users share your content on Google+ with the +1 button, this activity is often annotated in search results. [Watch this illuminating video on Google+](#) to understand why this is important. In this section, Google Webmaster Tools reports the effect of +1 sharing on your site's performance in search results.

Labs

The Labs section of Webmaster Tools contains reports that Google considers still in the experimental stage, but which can nonetheless be useful to webmasters. One of the most important of these reports is Site Performance, which indicates how fast or slow your site loads for visitors.



Bing Webmaster Center

Bing Webmaster Center

Key Features

Sites Overview - This interface provides a single overview of all your websites' performance in Bing powered search results. Metrics at a glance include clicks, impressions, pages indexed, and number of pages crawled for each site.

Crawl Stats - Here you can view reports on how many pages of your site Bing has crawled and discover any errors encountered. Like Google Webmaster Tools, you can also submit sitemaps to help Bing to discover and prioritize your content.

Index - This section allows webmasters to view and help control how Bing indexes their web pages. Again, similar to settings in Google Webmaster Tools, here you can explore how your content is organized within Bing, submit URLs, remove URLs from search results, explore inbound links, and adjust parameter settings.

Traffic - The traffic summary in Bing Webmaster Center reports impressions and click-through data by combining data from both Bing and Yahoo! search results. Reports here show average position as well as cost estimates if you were to buy ads targeting

each keyword.

[Sign Up](#)

Moz Open Site Explorer

Moz's [Open Site Explorer](#) provides valuable insight into your website and links.

Features

Identify Powerful Links - Open Site Explorer sorts all of your inbound links by their metrics that help you determine which links are most important.

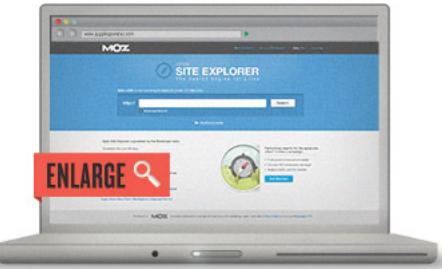
Find the Strongest Linking Domains - This tool shows you the strongest domains linking to your domain.

Analyze Link Anchor Text Distribution - Open Site Explorer shows you the distribution of the text people used when linking to you.

Head to Head Comparison View - This feature allows you to compare two websites to see why one is outranking the other.

Social Share Metrics - Measure Facebook Shares, Likes, Tweets, and +1's for any URL.

[Learn More](#)



Search engines have only recently started providing better tools to help webmasters improve their search results. This is a big step forward in SEO and the webmaster/search engine relationship. That said, the engines can only go so far to help webmasters. It is true today, and will likely be true in the future, that the ultimate responsibility for SEO lies with marketers and webmasters.

It is for this reason that learning SEO for yourself is so important.

CHAPTER NINE

MYTHS & MISCONCEPTIONS ABOUT SEARCH ENGINES



Over the past several years, a number of misconceptions have emerged about how the search engines operate. For the beginner SEO, this causes confusion about what's required to perform effectively. In this section, we'll explain the real story behind the myths.

Search Engine Submission

In classical SEO times (the late 1990s), search engines had submission forms that were part of the optimization process. Webmasters and site owners would tag their sites and pages with keyword information, and submit them to the engines. Soon after submission, a bot would crawl and include those resources in their index. Simple SEO!

Unfortunately, this process didn't scale very well, the submissions were often spam, so the practice eventually gave way to purely crawl-based engines. Since 2001, not only has search engine submission not been required, but has become virtually useless. The engines all publicly note that they rarely use submitted URLs, and that the best practice is to earn links from other sites. This will [expose your content to the engines naturally](#).

You can still sometimes find submission pages (here's one for [Bing](#)), but these are remnants of the past, and are unnecessary in the practice of modern SEO. If you hear a pitch from an SEO offering search engine submission services, run, don't walk, to a real SEO. Even if the engines used the submission service to crawl your site, you'd be unlikely to earn enough link juice to be included in their indices or rank competitively for search queries.



Meta Tags

Once upon a time, meta tags (in particular, the meta keywords tag) were an important part of the SEO process. You would include the keywords you wanted your site to rank for, and when users typed in those terms, your page could come up in a query. This process was quickly spammed to death, and was eventually dropped by all the major engines as an important ranking signal.

Other tags, in particular the [title tag](#) and [meta description tag](#) (covered [previously in this guide](#)), are [crucial for quality SEO](#). Additionally, the meta robots tag is an important tool for controlling crawler access. So, while understanding the functions of meta tags is important, they're no longer the central focus of SEO.

Keyword Stuffing

Ever see a page that just looks spammy? Perhaps something like: "Bob's cheap Seattle plumber is the best cheap Seattle plumber for all your plumbing needs. Contact a cheap Seattle plumber before it's too late."

Not surprisingly, a persistent myth in SEO revolves around the concept that keyword density—the number of words on a page divided by the number of instances of a given keyword—is used by the search engines for relevancy and ranking calculations.

Despite being disproved time and again, this myth has legs. Many SEO tools still feed on the concept that keyword density is an important metric. It's not. Ignore it and use keywords intelligently and with usability in mind. The value from an extra 10 instances of your keyword on the page is far less than earning one good editorial link from a source that doesn't think you're a search spammer.

Paid Search Helps Bolster Organic Results

Put on your tin foil hats; it's time for the most common SEO conspiracy theory: spending on search engine advertising (pay per click, or PPC) improves your organic SEO rankings.

In our considerable experience and research, we've never seen evidence that paid advertising positively affects organic search results. Google, Bing, and Yahoo! have all erected walls in their organizations specifically to prevent this type of crossover.



At Google, advertisers spending tens of millions of dollars each month have noted that even they cannot get special access or consideration from the search quality or web spam teams. So long as the search engines maintain this separation, the notion that paid search bolsters organic results should remain a myth.

SEARCH ENGINE SPAM

As long as there is search, there will be spam. The practice of spamming the search engines—creating pages and schemes designed to artificially inflate rankings or abuse the ranking algorithms—has been rising since the mid-1990s.

The stakes are high. One SEO noted that a single day ranking atop Google's search results for the query "buy viagra" could bring upwards of \$20,000 in affiliate revenue. So it's little wonder that manipulating the engines is such a popular activity. However, it has become increasingly difficult and, in our opinion, less and less worthwhile for two reasons:

1. Not Worth the Effort

Users hate spam, and the search engines have a financial incentive to fight it. Many believe that Google's greatest product advantage over the last 10 years has been its ability to control and remove spam better than its competitors. It's undoubtedly something all the engines spend a great deal of time, effort, and resources on. While spam still works on occasion, it generally takes more effort to succeed than producing good content, and the long-term payoff is virtually non-existent.

Instead of putting all that time and effort into something that the engines will throw away, why not invest in a value-added, long-term strategy instead?

2. Smarter Engines

Search engines have done a remarkable job identifying scalable, intelligent methodologies for fighting spam manipulation, making it dramatically more difficult to adversely affect their intended algorithms. Metrics like Moz's TrustRank, statistical analysis, and historical data, have all driven down the value of search spam and made white hat SEO tactics (those that don't violate the search engines' guidelines) far more attractive.

More recently, Google's Panda update introduced sophisticated machine learning algorithms to combat spam and other low-value pages, and the search engines continue to innovate and raise the bar for delivering quality results.

We obviously don't recommend employing spam tactics. But to assist the large number of SEOs who seek help when their sites get penalized, banned, or flagged, it is worthwhile to review some of the factors the engines use to identify spam. For additional details about spam from the engines, see [Google's Webmaster Guidelines](#) and [Bing's Webmaster FAQs \(PDF\)](#).

The important thing to remember is this: manipulative techniques generally won't help you, and they often result in search engines imposing penalties on your site.

PAGE-LEVEL SPAM ANALYSIS

Search engines perform spam analysis across individual pages and entire websites ([domains](#)). We'll look first at how they evaluate manipulative practices on the [URL](#) level.

Keyword Stuffing

One of the most obvious and unfortunate spamming techniques, keyword stuffing, involves littering keyword terms or phrases repetitively on a page in order to make it appear more relevant to the search engines. As discussed above, this strategy is almost certainly ineffectual.

Scanning a page for stuffed keywords is not terribly challenging, and the engines' algorithms are all up to the task. You can read more about this practice, and Google's views on the subject, in a blog post from the head of their web spam team: [SEO Tip: Avoid Keyword](#)



Manipulative Linking

One of the most popular forms of web spam, manipulative link acquisition, attempts to exploit the search engines' use of link popularity in their ranking algorithms to artificially improve visibility. This is one of the most difficult forms of spamming for the search engines to overcome because it can come in so many forms. A few of the many ways manipulative links can appear include:

Reciprocal link exchange programs: Sites create link pages that point back and forth to one another in an attempt to inflate link popularity. The engines are very good at spotting and devaluing these as they fit a very particular pattern.

Link schemes: These include "link farms" and "link networks" where fake or low-value websites are built or maintained purely as link sources to artificially inflate popularity. The engines combat these by detecting connections between site registrations, link overlap, and other methods targeted at common link scheme tactics.

Paid links: Those seeking to earn higher rankings buy links from sites and pages willing to place a link in exchange for money. These sometimes evolve into larger networks of link buyers and sellers, and although the engines work hard to stop them (Google in particular has taken dramatic actions), they persist in providing value to many buyers and sellers ([more on that perspective](#)).

Low quality directory links: These are a frequent source of manipulation for many in the SEO field. A large number of pay-for-placement web directories exist to serve this market and pass themselves off as legitimate, with varying degrees of success. Google often takes action against these sites by removing the PageRank score from the toolbar (or reducing it dramatically), but won't do this in all cases.

There are many more manipulative link building tactics that the search engines have identified. In most cases, they have found algorithmic methods for reducing their impact. As new spam systems emerge, engineers will continue to fight them with targeted algorithms, human reviews, and the collection of spam reports from webmasters and SEOs.

Cloaking

A basic tenet of search engine guidelines is to show the same content to the engine's crawlers that you'd show to a human visitor. This means, among other things, not to hide text in the HTML code of your website that a normal visitor can't see.

When this guideline is broken, the engines call it "cloaking" and take action to prevent these pages from ranking in their results. Cloaking can be accomplished in any number of ways and for a variety of reasons, both positive and negative. In some cases, the engines may let practices that are technically cloaking pass because they contribute to a positive user experience. For more on the subject of cloaking and the levels of risk associated with various tactics, see our article on [White Hat Cloaking](#).

Low Value Pages

Although it may not technically be considered web spam, the engines all have methods to determine if a page provides unique content and value to its searchers. The most commonly

filtered types of pages are thin affiliate content, duplicate content, and dynamically-generated content pages that provide very little unique text or value. The engines are against including these pages and use a variety of content and link analysis algorithms to screen out low value pages.

Google's 2011 Panda update took aggressive steps to reduce low quality content across the web, and [Google continues to iterate](#) on this process.

DOMAIN LEVEL SPAM ANALYSIS

In addition to scanning individual pages for spam, engines can also identify traits and properties across entire root domains or subdomains that could flag them as spam.

Linking Practices

Just as with individual pages, the engines can monitor the kinds of links and quality of referrals sent to a website. Sites that are clearly engaging in the manipulative activities described above on a consistent or seriously impacting way may see their search traffic suffer, or even have their sites banned from the index. You can read about some examples of this from past posts, including [Widgetbait Gone Wild](#) and the more recent coverage of the [JC Penney Google penalty](#).

Trustworthiness

Websites that have earned trusted status are often treated differently from those that have not. SEOs have commented on the double standards that exist for judging big brand, high-importance sites compared to newer, independent sites. For the search engines, trust most likely has to do with the links your domain has earned. If you publish low-quality, duplicate content on your personal blog, then buy several links from spammy directories, you're likely to encounter considerable ranking problems. However, if you post that same content on Wikipedia, even with the same spammy links pointing to the URL, it would likely still rank tremendously well. Such is the power of domain trust and authority.

Trust can also be established through inbound links. A little duplicate content and a few suspicious links are far more likely to be overlooked if your site has earned hundreds of links from high-quality, editorial sources like CNN.com or Cornell.edu.



Content Value

As we've seen, an individual page's value is computed in part based on its uniqueness and the visitor's experience; likewise is the entire domain's value assessed. Sites that primarily serve non-unique, non-valuable content may find themselves unable to rank, even if classic on- and off-page SEO is well-optimized. The engines simply don't want thousands of copies of Wikipedia filling up their indexes, so they use algorithmic and manual review methods to prevent this.

Search engines constantly evaluate the effectiveness of their own results. They measure when users click on a result, quickly hit the back button on their browser, and try another result. This indicates that the result they served didn't meet the user's expectations.

It's not enough just to rank for a query. Once you've earned your ranking, you have to prove it over and over again.

So How Do You Know If You've Been Bad?

It can be tough to know if your site or page actually has a penalty. Sometimes, search engines' algorithms change. Or maybe you changed something on your site that negatively impacted your rankings. Before you assume you've been penalized, check for the following:



Once you've ruled out the list below, follow the flowchart beneath for more specific advice.

Errors

Errors on your site that may have inhibited or prevented crawling. [Google's Webmaster Tools](#) is a good, free place to start.

Changes

Changes to your site or pages that may have changed the way search engines view your content. (on-page changes, internal link structure changes, content moves, etc.).

Similarity

Check for sites that share similar backlink profiles, and see if they've also lost rankings. When the engines update ranking algorithms, link valuation and importance can shift, causing ranking movements.

Duplicate Content

Modern websites are rife with duplicate content problems, especially when they scale to large size. Check out this post on [duplicate content](#) to identify common problems.



While this chart's process won't work for every situation, the logic has proven reliable in helping us identify spam penalties and mistaken flagging for spam by the engines, and separating those from basic ranking drops. [This page from Google](#) (and the embedded YouTube video) may also provide value on this topic.

Getting Penalties Lifted

The task of requesting reconsideration or re-inclusion in the engines is painful and often unsuccessful. It's also rarely accompanied by any feedback to let you know what happened or why. However, it is important to know what to do in the event of a penalty or banning.

1
If you haven't already, register your site with the engine's Webmaster Tools service ([Google's](#) and [Bing's](#)). This registration creates an additional layer of trust and connection between your site and the search engine teams.

5
Remove or fix everything you can. If you've acquired bad links, try to get them taken down. If you've done any manipulation on your own site (over-optimized internal linking, keyword stuffing, etc.), get it off before you submit your request.

2

6

Make sure to thoroughly review the data in your Webmaster Tools accounts, from broken pages to server or crawl errors to warnings or spam alert messages. Very often, what's initially perceived as a mistaken spam penalty is, in fact, related to accessibility issues.

3

Send your reconsideration/re-inclusion request through the engine's Webmaster Tools service rather than the public form; again, this creates a greater trust layer and a better chance of hearing back.

4

Full disclosure is critical to getting consideration. If you've been spamming, own up to everything you've done—links you've acquired, how you got them, who sold them to you, etc. The engines, particularly Google, want the details so they can improve their algorithms. Hold back, and they're likely to view you as dishonest, corrupt, or simply incorrigible (and they probably won't respond).

Get ready to wait. Responses can take weeks, even months, and re-inclusion itself, if it happens, is a lengthy process. Hundreds, perhaps thousands, of sites are penalized every week; you can imagine the request backlog.

7

If you run a large, powerful brand on the web, re-inclusion can be faster by going directly to an individual source at a conference or event. Engineers from all of the engines regularly participate in search industry conferences ([SMX](#), [SES](#), [Pubcon](#), etc.). The value of quickly being re-included can be worth the price of admission.

Be aware that with the search engines, lifting a penalty is not their obligation or responsibility. Legally, they have the right to include or reject any site or page. Inclusion is a privilege, not a right; be cautious and don't apply SEO techniques that you're skeptical about, or you might find yourself in a rough spot.

10

CHAPTER TEN

MEASURING & TRACKING SUCCESS



They say that if you can measure it, then you can improve it. In search engine optimization, measurement is critical to success. Professional SEOs track data about rankings, referrals, links, and more to help analyze their SEO strategy and create road maps for success.

RECOMMENDED METRICS TO TRACK

Although every business is unique, and every website has different metrics that matter, the following list is nearly universal. Here we're covering metrics critical to SEO; more general metrics are not included. For a more comprehensive look at web analytics, check out [Choosing Web Analytics Key Performance Indicators](#) by Avinash Kaushik.

1. Search Engine Share of Referring Visits

Every month, keep track of the contribution of each traffic source for your site, including:

- ★ **Direct Navigation:** Typed in traffic, bookmarks, email links without tracking codes, etc.
- ★ **Referral Traffic:** From links across the web or in trackable email, promotional, and branding campaign links
- ★ **Search Traffic:** Queries that sent traffic from any major or minor web search engine

Knowing both the percentage and exact numbers will help you identify weaknesses and give you a basis for comparison over time. For example, if you see that traffic has spiked dramatically but it comes from referral links with low relevance, it's not time to get excited. On the other hand, if search engine traffic falls dramatically, you may be in trouble. You should use this data to track your marketing efforts and plan your traffic acquisition efforts.

MONTH	VISITS
January 2009	340,305
February 2009	391,978
March 2009	219,900
Total	952,263

TOTAL NUMBER OF VISITS TO SEOMOZ
(January 1 - March 17, 2009)

SEARCH ENGINES	VISITS
Google	216,721
Yahoo	10,360
Windows Live	3,257
MSN Search	1,040
Alexa	1,098
Ask Jeeves	925
AOL Search	745
AT&T	242
Bogfile	178
Altavista	148
Subtotal	237,514
Total	238,286

NUMBER OF SEARCH ENGINE VISITS
(January 1 - March 17, 2009)

238,286 ÷ 952,263 = 0.2502

25% OF SEOMOZ'S TRAFFIC COMES FROM SEARCH ENGINES

2. Search Engine Referrals

Three major engines make up 95%+ of all search traffic in the US: Google and the Yahoo!-Bing alliance. For most countries outside the US, 80%+ of search traffic comes solely from Google (with a few notable exceptions including Russia and China). Measuring the contribution of your search traffic from each engine is useful for several reasons:

Compare Performance vs. Market Share

Compare the volume contribution of each engine with its estimated market share.

Get Visibility Into Potential Drops

If your search traffic should drop significantly at any point, knowing the relative and exact contributions from each engine

will be essential to diagnosing the issue. If all the engines drop off equally, the problem is almost certainly one of accessibility. If Google drops while the others remain at previous levels, it's more likely to be a penalty or devaluation of your SEO efforts by that singular engine.

Uncover Strategic Value

It's very likely that some efforts you undertake in SEO will have greater positive results on some engines than on others. For example, we've observed that on-page optimization tactics like better keyword inclusion and targeting reap greater benefits with Bing and Yahoo! than with Google. On the other hand, gaining specific anchor text links from a large number of domains has a more positive impact on Google than the others. If you can identify the tactics that are having success with one engine, you'll better know how to focus your efforts.

3. Visits Referred by Specific Search Engine Terms and Phrases

The keywords that send traffic are another important piece of your analytics pie. You'll want to keep track of these on a regular basis to help identify new trends in keyword demand, gauge your performance on key terms, and find terms that are bringing significant traffic that you're potentially under-optimized for.

You may also find value in tracking search referral counts for terms outside the top terms and phrases—those that are most valuable to your business. If the trend lines are pointing in the wrong direction, you know efforts need to be undertaken to course-correct. Search traffic worldwide has consistently risen over the past 15 years, so a decline in the quantity of referrals is troubling. Check for seasonality issues (keywords that are only in demand certain times of the week/month/year) and rankings (have you dropped, or has search volume ebbed?).

TOP REFERRING PHRASES <i>(January 1 - March 17, 2009)</i>		
SEARCH PHRASES	VISITS	PERCENT
seomoz	10,865	5.30%
seo moz	2,508	1.22%
seo tools	2,267	1.11%
what is seo	1,775	0.87%
seo blog	1,738	0.85%
social media marketing	1,688	0.82%
search engine optimization	1,435	0.70%
seo	1,342	0.65%
yahoo	1,016	0.50%
linkscape	953	0.46%
Subtotal	25,587	12.49%
Total	205,084	100.00%

4. Conversion Rate by Search Query Term/Phrase

When it comes to the bottom line for your organization, few metrics matter as much as conversion. For example, in the graphic to the right, 5.80% of visitors who reached Moz with the query "SEO Tools" signed up to become members during that visit. This is a much higher conversion rate than most of the thousands of keywords used to find our site. With this information, we can now do two things:

1. Checking our rankings, we see that we only rank #4 for "SEO Tools." Working to improve this position will undoubtedly lead to more conversion.
2. Because our analytics will also tell us what page these visitors landed on (mostly <http://moz.com/tools>), we can focus our efforts on improving the visitor experience on that page.

The real value from this simplistic tracking comes from the low-hanging fruit: finding keywords that continually send visitors who convert to paying customers, and increasing focus on rankings and on improving the landing pages that visitors reach. While conversion rate tracking from keyword phrase referrals is certainly important, it's never the whole story. Dig deeper and you can often uncover far more interesting and applicable data about how conversion starts and ends on your site.

SEARCH QUERY REFERRAL CONVERSION RATES AT SEOMOZ			
TOOLS & BRANDED TERMS CARRY THE HIGHEST CONVERSION RATES			
SEARCH PHRASES	VISITS	ACTION	CONVERSION
seomoz	10,907	216	1.98%
seo tools	2,274	132	5.80%
seo test	562	95	16.90%
seo moz	2,516	47	1.87%
seomoz.org	867	33	3.81%
free seo tools	400	33	8.25%
rank checker	587	30	5.11%
test my website	131	30	22.90%
seo blog	1,744	28	1.61%
seo	1,346	23	1.71%
linkscape	956	20	2.08%
check backlinks	381	17	4.46%
test my site	56	16	28.57%
search engine optimization	1,441	11	0.76%
crawl my site	42	11	26.19%
crawl test	64	10	15.62%
seo free tools	74	9	12.16%
test seo	86	9	10.47%
seomoz.com	159	8	5.03%
page strength	167	8	4.79%
spider my site	40	7	17.50%
seo analytics	101	6	5.94%

5. Number of pages receiving at least one visit from search engines

Knowing the number of pages that receive search engine traffic is an essential metric for monitoring overall SEO performance. From this number, we can get a glimpse into indexation—the number of pages from our site the engines are keeping in their indexes. For most large websites (50,000+ pages), mere inclusion is essential to earning traffic, and this metric delivers a trackable number that's indicative of success or failure. As you work on issues like site architecture, link acquisition, XML sitemaps, and uniqueness of content and meta data, the trend line should rise, showing that more and more pages are earning their way into the engines' results. Pages receiving search traffic is, quite possibly, the best long tail metric around.

While other analytics data points are of great importance, those mentioned above should be universally applied to get the maximum value from your SEO campaigns.



Google's (not provided) Keywords

In 2011, Google announced it would no longer pass keyword query data through its referrer string for logged-in users. This meant that instead of showing organic keyword data in Google Analytics, visits from users logged into Google would show the keyword query as "(not provided)." At the time, Google said they expected this to affect less than 10% of all search queries. But soon webmasters reported up to 20% of their search queries were from keywords (not provided).

Over the ensuing two years, webmasters began reporting much higher volumes of (not provided) keywords as more and more searches were performed using encrypted search (i.e., the https:// version of Google). With the launch of Google+, more logged-in users pushed this number even higher. Over time, smart SEOs have identified methods to contend with the (not provided) situation, and tips on reclaiming your data.

Analytics Software

The right tools for the job



- * [Moz Analytics](#)
- * [Omniture](#)
- * [Fireclick](#)
- * [Mint](#)
- * [Sawmill Analytics](#)
- * [Clicktale](#)
- * [Coremetrics](#)
- * [Unica NetInsight](#)



- * [Yahoo! Web Analytics](#)
(formerly Indextools)
- * [Google Analytics](#)
- * [Clicky Web Analytics](#)
- * [Piwik Open Source Analysis](#)
- * [Woopra Website Tracking](#)
- * [AWStats](#)

Additional Reading:

- * [How to Choose a Web Analytics Tool: A Radical Alternative](#)
from Avinash Kaushik way back in 2006 (but still a relevant and

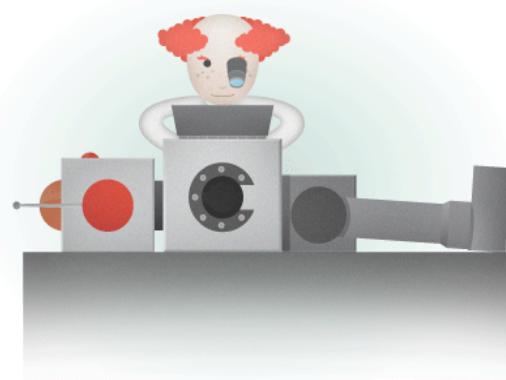
Choosing can be tough. We're partial to [Moz Analytics](#) because we built it from the ground up to provide the broadest suite of SEO tools available, and give you all of your inbound marketing data in one place. For free tools, our top recommendation is Google Analytics. Because of its broad adoption you can find many tutorials and guides available online. Google Analytics also has the

No matter which analytics software you select, we strongly recommend testing different versions of pages on your site and making conversion rate improvements based on the results. Testing pages on your site can be as simple as using a free tool to test two versions of a page header or as complex as using an expensive multivariate software to simultaneously test hundreds of variants of a page.

Metrics for Measuring

Search Engine Optimization

It's difficult to optimize for specific behaviors of search engines, because their algorithms aren't public. But a combination of tactics has proven effective, and new data is always emerging to help track the variables that influence ranking, and fluctuations in ranking signals. You can even use the search engines themselves to gain a competitive advantage by structuring clever queries and by utilizing data the engines have published. You can employ what you learn from these techniques, in concert with quality analytics software and SEO education, to formulate an action plan for optimizing your website.



Google Site Query

Restrict your search to a specific site (e.g., site:moz.com).

Useful to see the number and list of pages indexed on a particular domain. You can expand the value by adding additional query parameters. For example, site:moz.com/blog inurl:tools, will show only those pages in Google's index that are in the blog and contain the word "tools" in the URL. This number will fluctuate, but it's a decent rough measurement ([learn more from this blog post](#)).

Google Trends

At google.com/trends, you can research keyword search volume and popularity over time. Log in to your Google account to get richer data, including specific numbers instead of simple trend lines.



Bing Site Query

Restrict your query to a specific site (e.g., site:moz.com). Just like Google, Bing allows for queries to show the number and list of pages in their index from a given site. Be advised that Bing's counts are given to considerable fluctuation, which may limit the utility of the data.

Bing IP Query



Blog Search Link Query

Search links in a blog (e.g., link:<http://moz.com/blog>). Google's regular link query operator is not always useful, but their blog search generally yields high-quality results, sortable by date range and relevance. Learn more about the link operator in this [blog post](#).

Restrict your query to a specific IP address (e.g., ip:216.176.191.233). This query will show pages that Microsoft's engine has found on the given IP address. This can be useful to identify whether a page is hosted on a shared provider, or to find sites hosted the same IP.

Bing Ads Intelligence

Bing Ads Intelligence has a variety of keyword research and audience intelligence tools, primarily intended for search and display advertising. This guide won't dive deep into the value of each individual tool, but they are worth investigating and many can be applied to SEO.



Page Specific Metrics

Page Authority - Page Authority predicts the likelihood that a single page will rank well, regardless of its content. The higher the Page Authority, the greater the potential for that individual page to rank.

MozRank - MozRank, part of Moz's [Open Site Explorer](#), refers to Moz's general, logarithmically scaled 10-point measure of global link authority (or popularity). MozRank is very similar in purpose to the measures of static importance (which means importance independent of a specific query) that are used by the search engines (e.g., Google's PageRank or FAST's StaticRank). Search engines often rank pages with higher global link authority ahead of pages with lower authority. Because measures like MozRank are global and static, this ranking power applies to a broad range of search queries, rather than pages optimized specifically for a particular keyword.

MozTrust - Another component of [Open Site Explorer](#), MozTrust is distributed through links. First, trustworthy seed sites are identified to feed the calculation of the metric; these include major international university, media, and governmental websites. Websites that earn links from the seed set are then able to cast (lesser) trust-votes through their links. This process continues across the web and the MozTrust of each applicable link decreases as its distance from the seed sites increases.

Number of Links - The total number of pages that contain at least one link to a page, with a maximum of one qualifying link per page. For example, if the Library of Congress homepage (<http://www.loc.gov/index.html>) linked to the White House's homepage (<http://www.whitehouse.gov>) in both the page content and the footer, this would be counted as a single link.

Number of Linking Root Domains - The total number of unique root domains that contain a link to a page, with a maximum of one qualifying link per domain. For example, if topics.nytimes.com and www.nytimes.com both linked to the homepage of Moz (<http://moz.com>), this would count as a single linking root domain.

External MozRank - Whereas MozRank measures the link juice (ranking power) of both [internal](#) and [external links](#), external MozRank measures only the amount of MozRank flowing through external links (links located on a separate domain). Because external links can play an important role as independent endorsements, external MozRank is an important metric for predicting search engine rankings.



Domain Specific Metrics

Domain Authority - Domain Authority predicts how well a web page on a specific domain will rank. The higher the Domain Authority, the greater the potential for an individual page on that domain to rank well.

Domain MozRank - Domain-level MozRank (DmR) quantifies the popularity of a given domain compared to all other domains on the web. DmR is computed for both [subdomains](#) and [root domains](#). This metric uses the same algorithm as MozRank but applies it to the domain-level link graph, a view of the web that only looks at domains as a whole and ignores individual pages. Viewing the web from this perspective offers additional insight about the general authority of a domain. Just as pages can endorse other pages, a link that crosses domain boundaries (e.g., from a page on searchengineland.com to a page on <http://moz.com>) can be seen as an endorsement of one domain by another.

Domain MozTrust - Just as MozRank can be applied at the domain level ([Domain-level MozRank](#)), so can MozTrust. Domain-level MozTrust is like MozTrust but instead of being calculated between web pages, it is calculated between entire domains. New or poorly linked-to pages on highly trusted domains may inherit some natural trust by virtue of being hosted on the trusted domain. Domain-level MozTrust is expressed on a 10-point logarithmic scale.

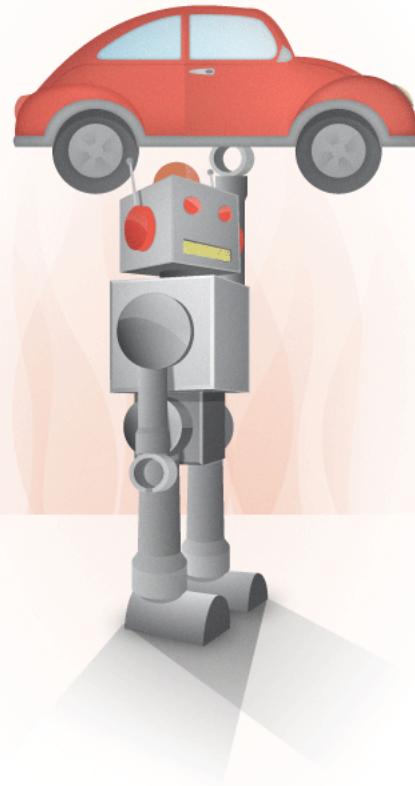
Number of Links - The quantity of pages that contain at least one link to the domain. For example, if <http://www.loc.gov/index.html> and <http://www.loc.gov/about> both contained links to <http://www.nasa.gov>, this would count as two links to the domain.

Number of Linking Root Domains - The quantity of different domains that contain at least one page with a link to any page on the site. For example, if <http://www.loc.gov/index.html> and <http://www.loc.gov/about> both contained links to <http://www.nasa.gov>, this would count as only a single linking root domain to nasa.gov.



APPLYING THAT DATA

Just knowing the numbers won't help unless you can effectively interpret and apply changes to course-correct. Below, we've taken a sample of some of the most common directional signals obtained by tracking data points and offered suggestions on how to capitalize on and respond to them.



Fluctuation

In search engine page and link count numbers

The numbers reported in "site:" and "link:" queries are rarely precise, so we caution against getting too worried about large fluctuations unless they are accompanied by traffic drops. For example, on any given day, Yahoo! reports between 800,000 and 2,000,000 links to the moz.com domain. Obviously, we don't gain or lose hundreds of thousands of links each day, so this variability provides little guidance about our actual link growth or shrinkage.

If drops in links or pages indexed coincide with traffic referral drops from the search engines, you may be experiencing a real loss of link juice (check to see if important links that were previously sending traffic/rankings boosts still exist) or a loss of indexation due to penalties, hacking, or malware. A thorough analysis using your own web analytics and [Google's Webmaster Tools](#) can help to identify potential problems.

Falling

Search traffic from a single engine

If a single engine is sending you considerably less traffic for a wide range of search queries, a small number of possibilities exist.

Identify the problem most likely to be the culprit and investigate. Visit forums like Cre8asite, HighRankings, and Google's Groups for Webmasters for help.

1. You're under a penalty at that engine for violating search quality or terms of service guidelines. Check out [this post on how to identify and handle a search engine penalty](#).
2. You've accidentally blocked access to that search engine's crawler. Double-check your robots.txt file and meta robots tags and review the Webmaster Tools for that engine to see if any issues exist.
3. That engine has changed their ranking algorithm in a fashion that no longer favors your site. Most frequently, this happens because links pointing to your site have been devalued in some way, and is especially prevalent for sites that engage in manual link building campaigns of low-moderate quality links.

Falling

Search traffic from multiple engines

Chances are good that you've done something on your site to block crawlers or stop indexation. This could be something in the robots.txt or meta robots tags, a problem with hosting/uptime, a DNS resolution issue, or a number of other technical breakdowns. Talk to your system administrator, developers, or hosting provider, and carefully review your Webmaster Tools accounts and analytics to help determine potential causes.

Individual

Ranking fluctuations

Gaining or losing rankings for one or more terms or phrases happens millions of times a day to millions of pages and is generally nothing to be concerned about. Ranking algorithms fluctuate, competitors gain and lose links (and on-page optimization tactics), and search

"Don't panic over small fluctuations. With large drops, be wary against

engines even flux between indexes (and may sometimes even make mistakes in their crawling, inclusion, or ranking processes). When a dramatic rankings decrease occurs, you might want to carefully review on-page elements for any signs of over-optimization or violation of guidelines (cloaking, keyword stuffing, etc.) and check to see if links have recently been gained or lost. Note that with sudden spikes in rankings for new content, a temporary period of high visibility followed by a dramatic drop is common; in the SEO field, we refer to this as the "freshness boost".

making a judgment call until at least a few days have passed. If you run a new site or are in the process of link acquisition and active marketing, these sudden spikes and drops are even more common, so simply be prepared and keep working."

Positive

Increases in link metrics without rankings increases

Many site owners assume that when they've done some classic SEO—on-page optimization, link acquisition, etc.—they can expect instant results. This, sadly, is not the case. Particularly for new sites, pages, and content that have heavy competition, ranking improvements take time. Even earning lots of great links is not a sure recipe to instantly reach the top. Remember that the engines not only have to crawl all those pages where you've acquired links, but also index and process them. So the metrics and rankings you're seeking may be days or even weeks behind the progress you've made.



*Congratulations! You've made it
through the entire Beginner's Guide to SEO!
Now you are ready to start optimizing your own site,
implement the tricks you have just learned
and improve your search results in the major search engines.*

THE END

Contributors

We would like to extend a very heartfelt thank you to all of the people who contributed to this guide, including [Urban Influence](#), [Linda Jenkinson](#), [Tom Critchlow](#), [Will Critchlow](#), [Dr. Pete](#), [Hamlet Batista](#), [chuckallied](#), [Ioris](#), [Optomo](#), [identity](#), [Pat Sexton](#), [SeoCatfish](#), [David LaFerney](#), [Kimber](#), [g1smd](#), [Steph Woods](#), [robbothan](#), [RandyP](#), [bookworm seo](#), [Rafi Kaufman](#), [Sam Nicolls](#), [Danny Dover](#), [Cyrus Shepard](#), [Sha Menz](#), [Casey Henry](#), [Lisa Wildwood](#), [Jeremy Modjeska](#), and [Rand Fishkin](#).

