

SEARCH ENGINE OPTIMIZATION

Me, me, choose me!

Without search engines our Internet would be a vastly useless, dangerous & flashing ad-riddled info-avalanche. But even now it's difficult to stand-out from the crowd. SEO skills can help us become a signal in the noise.



This chapter introduces search engine optimization, and insights into why search engines have become some of the world's most powerful commercial forces.

For marketing, there is nothing quite as precise or targeted as responding at exactly the moment someone is out looking.

Ranking #1 on Google is invaluable for brands.

As it suggests SEO finds the ways that sites can be *optimized* to get a desirable top ranked position. You can DIY without an expert,

Reference your glossary (at chapter's end) if you encounter terms that need more explanation.

but SEO has plenty of jargon and many tricksters. **Arm yourself with knowledge. Let's begin:**

YOUR PAYOFF FOR THIS CHAPTER

it's worth wrangling with analytics because you'll

- understand the reason why some people/brands are so POPULAR online - & get some of that magic
- see what has social value beyond the online world
- catch out the spammers and SEOs stuck in the past

GEAR UP:

for practical use of this knowledge you'll want.

- all that you've needed in previous chapters + your Analytics knowledge
- creativity and time to produce content
- and even more time to experiment and check the feedback

MYTHBUSTING

There are so many mythical beasts to choose from in this realm, mostly related to outmoded methods of optimizing that live on in the imaginations of the wistful SEO.

There is one, deeply infused with a sense of fairness and meritocracy that the Internet was founded on, that persists. It infers that if you produce something amazing & worthy that it will automagically be ranked well. Because Google **ranks and rewards quality.**

Genius languishes unrecognized in dusty corners online too. And mostly for the same reasons. *Sadly.* Marketing matters.

Who you know counts. Making it easy for people to find you **and why they should.** Have others shared the discovery?

Even unemotional algorithms that can't see pretty pictures recognise the basic components of social 'tastes'. Search engine results are increasingly based on good-sense & measurable value, as yet not the psychic detection of genius.

Quality Content ≠ **Search Engine Ranking**

FUNDAMENTALS



TECHNICAL FOCUS

Synapses and Hyperlinks

Ah the algorithms. If you've been looking forward to rolling up your mental sleeves and dissecting those **intricate mathematical formulae** that make search engines the modern marvel propelling humanity forward. Sorry.

To be truly amazed by how useful and invaluable the search engine has become, there's no point in abstract technobabble when we can understand it as a mirror of ourselves. Or rather how our brains work.

The primary job of a search engine (SE) is to **make sense of the chaotic flood of information contained on the Internet so that when one of us types in a query, sensible and useful answers come back.** It does this by "crawling" the hyperlinks with small automated programs called bots or spiders. Like our senses that collect info that goes to the brain to be interpreted, the bots take the info back to the SE servers where the data will be indexed, filtered and filed appropriately. The filtering is where the intelligence kicks in, in the shape of an ever-evolving algorithm. How the SE learns from feedback how to work better determines its dominance. Google is the reigning genius.

The results are sifted for **relevance, importance, popularity, authority and trust.** So the first few suggestions are likely to be the most useful and what you should pay attention to.

Getting a **top 10 listing on a results page**

has proven EXCEPTIONALLY valuable. So valuable that a profession was born out of getting a top ranked search slot.. Search Engine Optimization (SEO). Sophistication in the algorithms has meant SEOs try harder to get attention. Back when Yahoo! started ('94) webmasters could just submit their site and tell the SE what it was about. Next came "keyword stuffing" to force ranking for that term. Cloaking techniques hiding nasty spam sites and malware surprises kept spawning too.

Google's PageRank algorithm changed the on-page tricks by looking at the "social" off-page context of the site. **Trustworthy sites generally link to trustworthy sites.** This idea immediately produced more relevant results. Making Google very very popular. What continues to keep them in their unrivaled position is adaptive evolution of the algorithms so that SEOs and spammers don't dominate the rankings - *however well intentioned* - the battle rages on continuously.

In the next section we'll look at how to make it easier for an SE to recommend you with a little DIY SEO. But there is another way to get onto the search engine result page (SERP). **You can buy your way in.** Most SEs make their money from their sideline operations (literally) - the right side of Google's SERPs offer listings that are paid for by a Pay per Click model. Getting top rank on these listings is a special art too, often referred to as Search Engine Marketing (though purists insist SEM represents paid and organic/algorithmic/natural SEO too).

We'll be looking at paid inclusion and Pay-per-Click search entries in more detail in a forthcoming chapter on Online Advertising.

The factors that SEs use to choose what is worth pushing to top spots updates regularly, but the fundamentals remain the same: if you are **respected by others, recommend and keep good company, aren't deceitful, criminal or rude, you share, are useful, say what you do** and do it, and you are **INTERESTING.** You will be rewarded.

TIMELINE

a timely tale of SEO

- 1994** Yahoo! Directory launches.
- 1994** Search engine submission is a key activity for SEO
- 1994** Excite and Lycos launch
- 1995** Yahoo! uses OpenText to add crawler-based results to their human-powered directory
- 1995** Altavista launches with a powerful webcrawler that dominates the SE scene and quickly heralds in on-page SEO (keyword mania) over manual submission
- 1996** Yahoo! relaunched, its search engine now powered by AltaVista
- 1997** algorithm-cracking software developed by SEOs and soon cloaking emerges to protect their code from rival SEOs
- 1997** Ask Jeeves enters the scene
- 1998** PageRank algorithm developed and Google launches
- 1998** MSN launches, powered by Inktomi search algorithm
- 1998** DMOZ (the Open Directory Project) launches as a voluntary human-edited directory, and submission is back in fashion. Listings here still count favourably
- 1998** GoTo - the first paid search platform launches
- 1999** Altavista crippled by Google dismantles its search functionality
- 1999** SEO has its first conference, as a profession
- 2000** Yahoo! starts using Google search results over Altavista
- 2000** Google AdWords is born
- 2002** the 1st paid link brokerage and exchange PR Ad Network
- 2002** a month later, participating sites lose PageRank as punishment
- 2002** AdWords becomes the foremost paid search platform
- 2003** Google buys Blogger.
- Wordpress launches. Both create a sea of new comment spam
- 2003** AdSense released. Affiliate linking and sitebuilding explode
- 2003** Google makes radical update (known as Florida update) to the algorithm to combat spam
- 2004** Anchor text desirability spawns the first massive link farm Digital Point
- 2005** Nofollow tag created to combat comment spam. SEOs use it for 'PageRank sculpting'
- 2005** MSN is reborn as LiveSearch with its own algorithm
- 2006** Jeeves dumped from Ask Jeeves. Now just Ask
- 2006** the Big Daddy update to Google helps it understand the context of site links
- 2007** Text Link Ads ban by Google
- 2007** with over 2million articles Wikipedia holds domain authority by ranking for almost everything
- 2009** Microsoft drops LiveSearch, - enter Bing
- 2009** Google update, Vince, refines results by seeking user trust signals
- 2009** Ask now Ask Jeeves, again
- 2009** Google, Microsoft sign Twitter access deal to search tweets
- 2009** Yahoo! launches SmartAds & signs Bing as their search supplier
- 2010** Google releases update Caffeine, for faster indexing and favouring freshness in results.

Positive TOP RANKING FACTORS Negative

- 1. in-context links** other sites linking to yours from anchor text
- 2. external reference links** other sites generally linking to your URL
- 3. diversity of link sources** are your links from a link-farm or credible?
- 4. keyword in your title** using prime keyword/s in your title tag really helps

- 1. malicious cloaking** deceptively showing different content to bots vs. humans
- 2. buying links** from brokers to boost your incoming links quickly is punishable
- 3. linking out to a spam site** be very careful of who YOU link out to.
- 4. server downtime** is your site down often? Get a good host! Reliability counts too.



MAKING IT USEFUL

Where to begin. Make it easier for Search Engines to love you too.

Search Engine Optimization in 5 steps:

1. **market research**
2. **keyword research**
3. **on-page optimization**
4. **site structure**
5. **link building**

1. MARKET RESEARCH

The best place to begin, is with the previous chapter, Web Analytics. Use your analytics program and test often to optimize your online offering to your target market. *What you do uniquely well (or what your market believes you do) will get you on the path for step #2*

2. RELEVANT KEYWORDS

If you think about how *you* search it's easy to see why keywords are so valuable. We pop in a few terms and expect results that are the most closely-linked to those words. The skill in keyword SEO is understanding the searcher's intent. What problem would they be looking to solve if they come to your site? Intuit & test which words work best to get them there. Make sure they're relevant to your content not just trendy terms, algorithms do spot the gap
BASICS: Use Google Analytics to show you what keywords it picks up from your content, then look at the actual terms people are using to find you. Also check that you don't have a surprising number of odd keywords like "Viagra" on your reports - which could indicate a site hack.

Find a free keyword tool (like Wordtracker), find related terms and keywords to get into your content. If your keywords are rare or unique you needn't worry about PageRank.
ADVANCED: Use Google Adwords to gauge the going-rate of your keywords,

assess your Analytics, competitive research and start using paid search to complement your SEO efforts.(It won't rank you any higher on natural search but it will quickly give you a little more exposure).

Haphazard use of keywords, no matter how valuable they are is at best useless at worst. punishable for looking like spam. Onward #3

3. ON-PAGE OPTIMIZATION

aka Content Strategy.
BASICS: Your title should bear your keyword/s (not repeated but prominent) Use your keywords and their variants in rich, interesting, original content. Vary length & type of content Be a source of news. Google is now rewarding freshness. Draw in your social media feeds. Remember keyword use. Be as accurate and descriptive as you can particularly in your headers <h1> & <h2> Occasionally (not every time!) make your keywords **bold** to flag for importance. Check for duplicate content, it's like telling the same story over & over and will mark you down (for being careless or boring) Being interesting counts! Bots can't see what's in a picture so use the alt tag in your embedding code to give it a description.

Be descriptive when you link to a page (avoid 'Click Here' as your anchor text) Avoid: senseless keyword repetition Videos and podcasts similarly benefit from transcribing and describing. Metatags don't work for SEO anymore. *Have patience. On-page SEO is for the long term credibility not immediate return. Build what makes sense to humans AND bots, #4 is critical for this*

4. SITE STRUCTURE

Having compelling content is useless unless the searchbot can actually get around your site with ease to see it.
BASICS: Make thee tidy human readable URLs! Make and submit a sitemap to the SEs Bots can't see Flash, frames, dropdown menus, fill out forms or see through secure paywalls. Link content internally to get it indexed

Avoid: hidden text/links. Cloaking. Spreading spam & malware. Being evil. **ADVANCED:** If the architecture of your site is a mess of tangled code, its like a tumbledown house, the bot won't access what's there.. Web standards matter. Some content management systems (like Wordpress) are built with clean SEO in mind.

Use Google Webmaster Tools to see if you have any crawl errors that have blocked a bot from indexing your site properly. 2 techniques that block the path of bots should be used with care by SEO beginners: nofollow tag or robots.txt (you can inadvertently block indexing)

5. LINK BUILDING

Searchbots jump by hyperlink from page to page, so if you have a lot of good links, you increase the odds of being indexed sooner & more regularly. The fewer incoming links you have the more important on-page SEO or PPC will be. **BASICS:** Create outstanding/useful/entertaining content that people want to link to! Use social media to make people aware of it.

Get involved in quality conversations through comments on blogs. Create badges/buttons for fans to put on their sites to link back Research/photos/video licensed under attribution comes back to you too. Syndication, quizzes, tools, press release, answering forum questions. Be useful! Lists of links on a page (like a blogroll) without quality content can be marked as spam.

Avoid: buying links from brokers, joining a link-farm or linking to a spammy site There is nothing advanced about link-building, it requires old-fashioned relationships, sharing and being useful.

"By chasing after a good user experience, you help ensure that you and the search engines are both working in the same direction. That's much better than you chasing the search engines, which are in turn chasing what we think is best for users." - Matt Cutts (Google)

PRACTICAL APPLICATION

now you know, give these a go:

- Look through the 5 steps and begin using your analytics for SEO, zoom in & test your keywords, write and produce original context for the keywords, make sure you're making it physically easy for bots to access your content, share, be useful and create noteworthy content for others to link to you.
- Try out some of the tools from the right column on Page 4 to make it easier

THE BIG 3 ESSENTIAL IDEAS

(the least you'll need to know)

Idea #1 build for your **audience not for the search engines**. Usability and paying attention to your web-analytics will guarantee you sustainable SEO reward

Idea #2 be useful, be clear about whose problem you can fix *(even boredom is a problem.)* and make it easy for them to find you, by making it easy for search engines to check you out and recommend you to them in turn.

Idea #3 if it sounds too good to be true... even Google gets spammed by chancers promising to get them to #1 on Google. If the promise comes with careful content strategy, really understanding your offering and t i m e then consider it. Else send the tricky snake-oilers packing.

REFERENCE WORKS

& RECOMMENDED RESEARCH LINKS

Fundamentals and Making it Useful

Aaron Wall of SEOBook on Knol (5 of 9 steps) <http://knol.google.com/k/seo-basics>
<http://guides.seomoz.org/beginners-guide-to-search-engine-optimization>

Recommended readings:

<http://googlewebmastercentral.blogspot.com/>
<http://www.seomoz.org/article/search-ranking-factors>

Glossary:

http://www.sempo.org/learning_center/sem_glossary/
<http://www.seobook.com/glossary/>

Stats:

Pew Internet Statistics <http://www.pewinternet.org>
 Stat Counter Top5 Search Engines (updated June 2010)
http://gs.statcounter.com/#search_engine-ww-monthly-200905-201006
 Chitika Research (updated May 2010) <http://chitika.com/research/2010/the-value-of-google-result-positioning/>

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THE FLIP-SIDE

On being too clever and the perils of the Black Hat.

The quick fix conquers even the most reasonable minds with its appeal of **outfoxing something that would otherwise take time and work**. It runs on irrationality but is no less powerful for it.

Like crash diets that leave us worse off than when we started, Black Hat SEO has the nasty habit of delivering an exciting surge of popularity, only to dump the site back into obscurity after flirting briefly with glory.

The spell wears off once the search engines have discovered the deception and many sites get an outright ban.

And it's worth remembering that search engine listings are not enshrined as a constitutional right. It's up to the company to choose to let you back in.

Cheating on the current game-guidelines with tricky spam hacks has a limited lifespan and spares no-one for their realworld prestige (as BMW learned with a Google ban for dodgy behaviour). Consider Black Hat the diet pill of SEO.

SEARCH ENGINE STATS

Stats to stimulate your efforts

- ☞ Google had 89.8 % of global searches last year and climbed to 90.44 % by May [StatCounter]
- ☞ Bing have climbed from 0% to 3.54 % of the search engine share in their 1st year of operation. Yahoo! hold 4.25% market share. [StatCounter]
- ☞ One of the biggest movers in search hasn't been an engine, but Facebook who posted a 48% rise in searches in March 2010 (comScore)
- ☞ The #1 spot on a Google results page has been shown to drive about 34% of traffic - a little less than results 2 to 5 combined, more than 5 to 20 put together! [Chitika]
- ☞ Going from 11th (2nd page of results) to 10th can yield a 143% jump in traffic. [Chitika]
- ☞ Just over 90% of internet users navigate and investigate through a search engine. A MASSIVE global industry showing no signs of slowing

SOCIAL CURRENCY

SEO tools give you entry into whole new conversations

MARKET ANALYSIS

- ✘ **SEO for Firefox**
- ✘ **Yahoo! Site Explorer**
- ✘ **Bing Webmaster Centre**
- ✘ **Google Search Insights**

KEYWORDS

- ✘ **Google Keyword Tool**
- ✘ **Wordtracker**

SITEMAPS

- ✘ **Sitemaps.org**
- ✘ **XML-sitemaps.com [DIY]**

SITE ANALYSIS

- ✘ **Google Webmaster Central**
- ✘ **RankChecker**
- ✘ **SEO Toolkit (SEOMoz)**

LINK ANALYSIS

- ✘ **Xinu**
- ✘ **OpenSite Explorer**

GENERAL

with TONS of SEO tools to try, play it safe with a recommended site first:

- ✘ **seomoz.org/tools**

Searching Simplicity - the Glossary

Words from the SEO, SEM and SERP world, decoded

404 Page comes up when a URL on your site not found. Means that search bots and humans lose their way and generally leave at this juncture Sad situation for your SEO.

AdWords Google's ad and link auction network. Most of Google's ads are keyword targeted and sold on a cost per click basis here.

Aged Page some search engines take site age, page age, user account age, and related historical data into account when attributing trust and ranking.

Alt attribute the text equivalent inserted into the hyperlink for an object like an image that can't otherwise be discerned by a search engine

Anchor Text the text that a user would click on to follow a hyperlink

Ask is a search engine owned by InterActive Corp. They were originally named Ask Jeeves, but Jeeves was retired in 2006.

Authority the strength of a page or domain to rank well in search engines. Five large factors associated with authority are link equity, site age, traffic trends, site history, and publishing unique original quality content.

Backlinks offsite links pointing at a particular web page.

Ban punishment exacted by a search engine in response to black hat SEO & spamming

Black Hat SEO the practice of using unethical techniques to make your search rankings go up. Also known as spamdexing. Practices that degrade both the relevance of search results and the user-experience of search engines like link-farms, keyword stuffing or cloaking. Search engines actively hunt those employing these techniques in order to remove them from their indices. The Dark Side.

BYG the big 3 of search: Google Yahoo and Bing (Microsoft).

Canonicalization – The process of picking the best URL when there are several choices; this usually refers to home pages. *Source: Matt Cutts Blog: SEO Advice*

Cloak delivering different content to the search engine spider than that seen by humans. This Black Hat tactic is frowned upon by the search engines and generally results in an outright ban for that site.

Code Swapping (alt. bait and switch) Changing the content after high rankings are achieved.

Comment Spam Posting blog comments for the purpose of generating an inlink to another site. The reason many blogs

use "link condoms" like "rel=nofollow" to avoid sharing their reputation with this dodgy breed of link seeker

CPC - Cost per Click where PPC indicates payment based on click-throughs, CPC indicates measurement of cost on a per-click basis for contracts not based on click-throughs.

CPC bid The amount of money you're willing to pay for a keyword ad

Crawler also called a spider or robot/bot is an automated program sent out by a search engine "reads" page text contents and web page coding, and also follows links to hyperlinked pages. It takes copies of the web pages it's crawled and stores these in the search engine's index

Deep Link a link which points to an internal page within a website.

DMOZ /The Open Directory Project is the largest human edited directory of websites. Owned by AOL, and run by volunteer editors.

Doorway Page a web page specifically created to obtain organic rankings. They're often pages just filled with keyword, meant to funnel searchers into the main web site. It's considered an outdated spam tactic, but still found in practice.

Fuzzy Search Search that can find matching terms even with misspellings

Geo-Targeting ads distributed based on geographic location

Google bomb a collaborative project of multiple site owners with SEO skills to change/hack the Google search results for a particular phrase - usually for humorous effect. The "miserable failure" for George Bush is one memorable example.

GoogleBot Google's search engine spider.

Google Bowling Knocking a competitor out of the search results by pointing hundreds or thousands of low trust low quality links at their website.

Google Juice trust, authority and pagerank from Google, which flows through outgoing links to external pages.

Hidden Text an SEO technique used to show search engine spiders text that human visitors do not see.

Keyword a word or phrase that your targeted audience is likely to search for.

Keyword Density the measurement of how frequently any given keyword appears within a web page. Too high a density can result in a web page being classified as spam while too low a density will cause a page to not be indexed well for the given keyword

Keyword Stuffing adding great numbers of keyword terms into the HTML or tags of a web page. An old but now useless SEO standard practice.

Latent Semantic Indexing - LSI uses word associations to help search engines know more accurately what a page is about.

Link Popularity Link popularity generally refers to the total number of links pointing to any particular URL. If you have more "links" than your competitors, you are typically known to have link cardinality or link superiority.

Link Farm a group of sites which all link to each other

Long tail longer more specific search queries, rather than shorter broad queries. With increasing online sophistication, a larger percentage of all searches are long tail searches.

Mindshare A measure of the amount of people who think of you or your product when thinking of products in your category.

Nofollow Attribute used within a hyperlink like `rel="nofollow"` to prevent a link from passing link-authority (see comment spam)

Organic search listings on SERPs that aren't paid for. The listings for which search engines do not sell space (eg. main body of Google search results vs. paid-for right side)

PageRank the Google logarithmic scale developed by Page and Brin while still at Stanford University for denoting importance of pages and web sites. Today it is one of hundreds of factors in the algorithm that determines a page's rankings. The PageRank formula is:

$$PR(A) = (1-d) + d (PR(T_1)/C(T_1) + \dots + PR(T_n)/C(T_n))$$

where PR= PageRank
d= dampening factor (-0.85)
c = number of links on the page
PR(T_i)/C(T_i) = PageRank of page i divided by the total number of links on page i, (transferred PageRank)

[in case you were curious. No glossary would be complete without it.]

Paid Inclusion paying a fee to a search engine to be included in that search engine or directory

Personalization biases our search results based on our searching precedence.

PPC Pay per Click - the online ad payment model where payment is based solely on qualifying click-throughs on search engines

Reciprocal Link 2 different sites that link out to each other.

Referrer in clicking on a link from one website to another, the previous site you were on will be the referrer

Robots.txt a text file in the root of your site used to direct the activity of search engine crawlers. This file is typically used to tell a crawler which portions of the site should be crawled and which should not.

SEM Search Engine Marketing - generally, the combination of SEO, complemented with paid search marketing through PPC or paid inclusion. Though contentiously referred to by many SEOs as those primarily involved in paid search methods. Rather than their organic, sustainable practice.

SERP Search Engine Results Page - that page of results you see after you run your query on a search engine.

SEO Search Engine Optimization - the process of optimizing a site to be found by the right audience and search engines. In choosing targeted keyword phrases related to a site, and ensuring that the site places well when those keyword phrases are part of a Web search. Done well it adds to the user experience, but search engine spamming takes away from the user experience, but the edges between them are often blurred.

SEO is also: Search Engine Optimizer - one who practices the above.

TrustRank a search relevancy algorithm which places additional weighting on links from trusted websites like major brands, educational or governmental institutions.

White Hat those SEO techniques, which do conform to current best-practice guidelines, and don't actively try to deceive or "game" the search engine results.