

An eBook by



The Complete
Internet Marketer

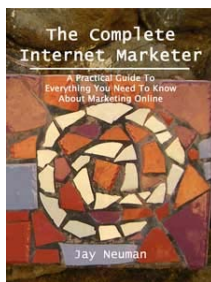
Everything You Ever Wanted To Know About Search Engines

But Were Afraid To Ask !

*Chapter 6 from
The Complete Internet
Marketer*

Jay Neuman

This eBook is an excerpt from:



**The Complete
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A Practical Guide to Everything
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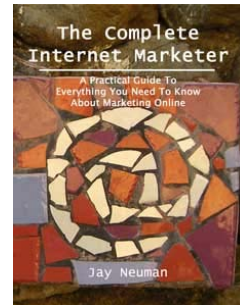


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Earning Your Cool Sunglasses The Yahoo "Cool Sites" Story

In 1995, the most coveted honor a website could get was to have a pair of cool sunglasses displayed next to their search results on Yahoo. This was Yahoo's way of designating the website as a "Cool Site." That little pair of dark sunglasses told the world, "Check this site out!" Cool sites would also be displayed at the top of search results listings for relevant keywords.

Search engines, as we know them today, had been a part of the World Wide Web since 1993. By 1995, the combination of irreverent nerdiness and relevant search results had propelled Yahoo to the head of the pack. The Cool Sites ratings made them indispensable. The Internet was still new to most people. Every week, websites would pop up with something useful or unusual. People relied on those cool sunglasses at Yahoo to tell them which ones were worth checking out. It was a day to celebrate when your website got those cool sunglasses and became a "Cool Site."

The idea of using search engines as part of an overall Web marketing strategy was not clearly understood until then. Those cool sunglasses brought it into focus for everyone wanting to have a successful website. Search engines held the key to the popularity of your website. The technology powering search engines was still primitive, by today's standards. But, the lesson Yahoo's cool sunglasses taught marketers has become a truism of Internet Marketing. To be successful online, you must be successful with search engines.





The ABC's Of Search Engines

If you are like most web users, a search engine is the first place you go when you are looking for something online. Entering a word, or phrase into a search box has become so much a part of our everyday lives, we do not even think about it anymore. You click, "Search." Then a long list of websites comes back. Sometimes over a million sites are listed. You also see sponsored links at the top and right side of the page. To be successful with search engines, you want your link to show up on the first page of search results when people enter terms related to your products or services. Preferably, you want to be near the top of that page. There are two ways to do this, *natural search* and *paid search*. Successful search engine strategy will usually employ a combination of both.

Natural Search

Search engines use computer programs, called *spiders*, to read the text they find on web pages. Then they index those words and phrases to be searched in the future. After you click the search button, the search engine matches the terms you entered with the indexed values to return a list of web pages. Because it is based on finding information naturally occurring on existing websites, this process is sometimes called *natural search*. Another term often used is *organic search*. These terms are interchangeable.

Paid Search

Natural search is a free service. Search engine companies do not make money from the free service. To make money, they also display sponsored links which are paid for by websites being listed. Sponsored links

***Two ways to
bring search
engine traffic
to your web-
site: natural
search & paid
search***





are displayed by matching the term you entered with a list of terms other websites have submitted. Every time a sponsored link is displayed and then clicked on, the submitting company or organization is billed. Because it is based, not on existing web content, but on paid listings, this process is called *paid search*.

Being Successful with Search Engines

To be successful in driving traffic from search engines to your website, you must optimize search results listings from both natural and paid search. In both cases, this comes down to three things:

1. Get Listed

First, you have to make sure your website appears at the top of the search results listing. When people search for the words and phrases relevant to content on your website, they should see your site in the first few results. This is done by optimizing your web pages and by buying sponsored links on search engines. Both of these will be discussed in detail later in this chapter.

2. Get Clicked

Once people are seeing your website in their search results listing, you must get them to click on your link. This is done through good copy writing. The displayed search results listing will contain a title and a short description. For natural search, this information usually comes from the web page's meta tags or from the first text found on the page. For paid search, you will submit a title and description to be displayed. This should be thought of as your advertising copy. Take as much care

Get Listed

Get Clicked

***Convert Clicks
to Actions***





writing this copy as you would with any other form of advertisement.

3. Convert Clicks to Actions

Finally, after a customer sees your link and clicks on it, you want them to perform some action when they get to your website. What that action is will depend on the goals of your website. It may be to buy something from your online store. It may be to subscribe to your service or newsletter. It could be any number of things. Whatever that action may be, it is up to you to get customers to perform that action after they have clicked on your link. This is done by designing the web page they land on to elicit the desired action.

The first page a web user sees after clicking your link is called the *landing page*. For natural search, users will land on whatever page the search engine indexed and listed in the search results. For this reason, every web page on your site should be designed to draw customers to the desired action that is relevant to that particular page. For paid search, you provide the search engine company with a URL to the page web searchers will land on. You want to make sure customers either land on a page designed to generate the desired conversion or create a custom landing page specifically for that web listing. Do not leave this up to chance. Clicking on your link is only the beginning. It is up to you to continue marketing to them after they get to your site.

Now let us look at the two ways you can get your website listed on search engines.

Search Engine Optimization (SEO) is how to get search engines to list your website at the top of search results





Search Engine Optimization (SEO)

Being found when people search for terms related to the information your website is offering is the single most important thing you can do to drive traffic to your website. The simple truth is, people use search engines to find what they are looking for online. An absolutely critical part of designing your website is to make sure search engines find it and list it at the top of search results for relevant terms. This is done by finding out what the major search engines are looking for and then making sure your web pages are organized so they can easily be found. Optimizing your web pages to be found, and listed by search engines is called, *Search Engine Optimization*, or SEO for short.

As you read through the rest of this chapter, you will learn more about how SEO works and how to successfully optimize your web pages.

Search Engine Marketing (SEM)

Another way to get your listing in front of web searchers is to pay to be a sponsored link. Search engines typically have sponsored listings at the top of their search results page or along the right side of the page. Buying paid search listings is called *Search Engine Marketing*, or SEM for short.

Purchasing placement on search engines is done by “buying keywords.” Keywords are single words or phrases people enter into the search box when they perform a search. You pick the keywords you think are relevant to your product or service. Then you pay to have your listing appear when those keywords are searched for. More popular keywords will cost more

Search Engine Marketing (SEM) is paying to have your website listed as a sponsored link”





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than less popular ones. You will pay a per-click fee each time your link is clicked on. In some cases you may also pay a listing fee that guarantees your listing will show up on the first page of web searches for the keywords you select.

Since multiple sponsored links can be displayed for any given keyword, most search engines use a bidding process. You will place a bid for how much you want to spend for each click. Then the listings with the higher bids will appear higher in the search results listings. You can also tell the search engine what your maximum budget is. They will only display your listing until your budget has been met.

It is a good idea to test a number of keywords on a number of different search engines. Then stick with the ones that perform the best for you.





Successful Search Engine Optimization In Seven Easy Steps!

Search Engine Optimization is the most important thing you can do to bring traffic to your website. In the "Search Before the Purchase" report of 2005, DoubleClick and ComScore Networks found that roughly half of all online buyers perform a related search before they make their purchase. If your website does not show up in the search, then you have missed the opportunity to reach that customer. But how do you make sure your website gets listed? It does not have to be a mystery.

Search engines have programs called *spiders* that scour the Internet looking for web pages to list in their search results. *Search Engine Optimization* is web-speak for organizing content on your website so the spiders will find your web pages and list them in the top search results. Professionals in the field usually just call it *SEO* for short.

The secret to successful SEO is found in following these seven easy steps.

Step 1: Make It Easy for Spiders to Find Your Site

The first step in getting listed by search engines is to make sure they find your website to list it. Luckily, search engines help with this. They will allow you to submit your website to them to be spidered. The easiest way to be found by a search engine is to submit your site to them. Identify the search engines you want to be listed on, go to their websites and find out their submission requirements.





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Submitting your website to search engines will get you listed. But, it can sometimes take a long time. In addition to submitting your web pages to search engines, it is also important to optimize your website so it is easy for search engines to find it. There are really two things that search engines do that affect them finding your site. First, you must have URLs that are easy for spiders to read. This is discussed in the next section. Second, you should try to get your website linked to from other popular websites. Since spiders find websites by following links, they will find your site as they are crawling other sites.

Step 2: Help Spiders “Crawl” Your Site

Once a spider finds your home page, it will follow the links on the page to other pages on your site. Then it evaluates each of those pages. This is called *crawling*. An easy way to make sure the spiders crawl the pages you want listed is to create a site map page linked to the home page. If this page contains links to all the pages you want crawled, then each page is only two links away from the home page.

In addition to having a site map of links that spiders can follow, it is also important to have URLs that spiders can read. Many websites dynamically generate URLs for some of their web pages that rely on information pulled from a database. This is a very good idea for efficient website design, but it throws up a roadblock for spiders trying to crawl your website. Spiders are designed to read words and phrases. They often will completely ignore parameters that appear in dynamically generated web pages. For large, dynamically generated websites, this can be a complex issue. However, if you follow two simple rules, you will be ahead of the game:

Arachnophobia ?

To block spiders from crawling a page on your site, list the page in your robots.txt file





- ✓ A fixed path is easy to read. Dynamically generated URLs with parameters are hard for search engines to read.
- ✓ English words are easy to read. Numbers and alphanumeric codes are hard for search engines to read.

Step 3: Optimize Keywords

People find what they are looking for on the Internet by entering keywords into a search engine. The search engine finds your web page by matching those keywords to words and phrases on your site. The next step to getting your web pages listed is to learn what keywords people are most likely to use to find your site. Then make sure those words and phrases are strategically placed in places the search engines look. Optimizing keywords on your web pages is the heart of search engine optimization.

There are three critical things you must do with your keywords, once you have decided what they are:

1. **Keyword Density**

Keywords should appear more than once on your web page to get a high ranking by the search engines. However, if they appear too often on the page, the search engine will see it as a way to trick the search engine and will push the page into a lower ranking. Search engines look at the amount of times the keyword appears on your page as a percentage of total words on the page. This is called *keyword density*.

***Three ways
keywords can
work for you:***

- 1. Keyword density***
- 2. Meta tags***
- 3. Position on the page***





2. Meta Tags

Each web page can contain a title, keywords and a page description. These are placed in hidden locations on the web page called *Meta Tags*. They do not show up on the page, but the search engine can see them. The Title, Description and Keywords meta tags give web developers a way to categorize their own web pages. So, this is the first place search engines look to determine what words are most relevant to the page. The keywords that are most relevant to the web page should appear in these meta tags.

Many people try to trick search engines by loading their meta tags with keywords that are not directly related to the content of the page. As with keyword density, putting too much into your meta tags will push your search results listing down. Your search engine ranking may also be reduced by having words in your meta tags that do not also appear in the body of the page.

The Title and sometimes the first few words in the Description will show up in the search results listing. These two meta tags should be considered as advertising copy. Care should be taken to provide wording that people will want to click on.

3. Position on Page

Third, search engines look for the location of words on the page to determine how relevant they are to that page. The HTML code on your web page can identify titles and subject headers. Keywords appearing in these are considered important to the page. Also, key-





words appearing closer to the top of the page are considered more important than words appearing lower on the page.

By identifying which keywords you expect your target audience to be searching for and then following these three guidelines, you will obtain high search result rankings for your most important keywords.

Step 4: Create Content Pages Optimized for Different Keywords

You may want your website to appear in the search results for many different keywords. If you have an online store, you would probably want to appear for all of your best selling products. If you offer a service to business clients, you may want to appear in listings for all of the target industries you service. The challenge is that you cannot optimize one web page to rank high for all of these different keywords. The answer is to create content pages relevant to each of these keywords. Then optimize these content pages to rank high for their targeted keywords.

An online store could create buyer guides for each of their top product categories. A business-to-business supplier could create custom pages tailored to the needs of each target industry. Another common practice is to create an area on your website for archived articles you have written. These pages will be rich in keywords related to the topic at hand. If you further optimize these pages for those keywords, search engines will direct traffic to them. Then, design the layout of your article pages and other custom pages to draw people from those pages into the main areas of your website.

Archive old newsletter articles on your website. They are rich in keywords for search engines to find





Step 5: Get Linked to from Other Sites

Getting other sites to place links to your site is another essential part of your search engine strategy. Search engines look at the amount of times your website is linked to from other sites when ranking your web page. In general, the more links you have coming to your site the better it is for your ranking. If your site is linked to from other high ranking sites, that will do even more for your ranking.

When you are thinking about getting links from other sites, the basic rule is to have content that users on other websites will find useful. Then, find those websites where your content will make a contribution. Once you find those sites, you will pursue getting both *reciprocal links* and *one-way links*.

1. Reciprocal Links

Reciprocal links are links from websites that you also link to. This is a tit-for-tat situation. When you have compiled your list of websites, look for websites that have content you would like to link to from your website. Then place a link to their website on your own site. After you have linked to them, then contact the owner of the website directly and ask to have your link placed on their site. All websites are in the same boat. They all need to be linked to in order to get higher rankings. So most will be open to your request. There are also services that specialize in helping you find reciprocal links.

2. One-Way Links

Reciprocal links are important. However, to

***Reciprocal
Links (good)***

***One-Way
Links (better)***





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get a high ranking, you must also have one-way links. These are links from sites that you are not also linking to. Search engines look for both types of link when determining their ranking. The basic rule applies. Have web content that is worth being linked to. If you are targeting your website to a niche audience, then create content that is especially useful to that niche. Other sites serving the same niche will want to link to your site. It helps them serve their customers. This process can take time, though. As your site obtains higher search ranking, more sites will find you and want to link to your content. But, of course, you need to get those links to get the higher ranking. To get beyond this, you can look for websites that allow you to submit content to them that will contain links back to your site.

A good way to get one-way links is to find websites that publish and archive articles related to the content on your site. Once you find these, submit articles to them. When they publish your article and store it in their archive, you will get a link back to your site.

Also, look for websites that act as information clearinghouses, with links to other sites. Find business directories that cater to your industry or niche issue. Then submit your website to be listed by them. If you have created content that can be offered as a free download, you can submit it to download sites. If you have a blog on your website, submit it to be listed in blog directories.

It used to be a common technique to try and trick search engines by creating a variety of websites, then having them all link to each other. This is called





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crosslinking. As with most ways people have tried to trick search engines, this one has been found out also. Crosslinking is not prohibited by search engines. It is only natural for a family of websites to link to each other. However, too much crosslinking will be noticed and hurt your ranking.

Step 6: Create a Robots.txt File

The main reason for search engine optimization is, of course, to get search engines to find and list your web pages. However, there are often pages that you do not want them to find. You may have an area of your website for customers, that you do not want the general public going to. You may have pages that simply serve as redirect pages which record click stream information on the way to other content pages. Some websites have pages that run interactive software which do not work with automated robots. There are many reasons why you may not want a particular page listed.

Well, the search engines do not want to go to these pages either. They would like for you to tell them which pages they can skip. You can do this by creating a small text file called the *robots.txt* file. This file sits at the root directory of your website. It is the first thing search engines look for when they arrive at your website. The robots.txt file contains instructions to search engines on which pages to skip over.

Some search engines will not spider a website if a robots.txt file is not present. You should create one even if there are no pages to exclude. Search engines will see the blank file and proceed to spider all of your web pages.





Step 7: Monitor and Improve

Getting your website to show up in search results does not need to be a mystery. By following these seven steps, your web pages will appear in your customers' search results. It is an iterative process. Your first pass at it may not yield the results you were hoping for. Keep at it. Think of these seven steps as seven levers you keep adjusting until you find the right balance. When you find that balance, your site will consistently appear in the first page of search results for relevant keywords. Then, keep tracking your results. Things will change over time. SEO is a process you should expect to repeat periodically. It is a relatively small investment in time that will yield big results.

Each search engine has things it looks for when finding and ranking web pages. Things like the format of your URLs or the optimal keyword density vary from engine to engine. Research what the search engines you want to be listed on are looking for. Optimize your site for those search engines. This changes over time, so you must repeat this exercise periodically.





Successful Search Engine Marketing In Seven Easy Steps!

Search Engine Marketing is the most effective way to advertise online. When people want to find something online, they start with a search engine. Getting a link to your website and a few words of promotional copy displayed on the first page of their search results reaches them at the most opportune moment. Customers have just described what they want by entering the search term. They are actively seeking something they can respond to. It is the best case scenario for targeted marketing.

Buying sponsored links on search engines is easy. Some search engines have automated bidding tools to make buying keywords as easy as placing a bid on eBay. On the other hand, very small differences in your click-thru rates and conversion rates can make the difference between positive and negative return on your investment. It is a balancing act.

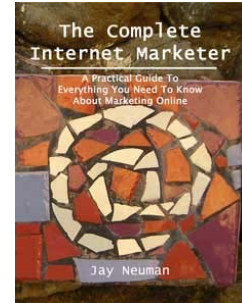
The secret to successful search engine marketing is found in following these seven easy steps.

Step 1: Choose Search Engines

Which search engine should you advertise on? This is the first decision you must make once you have decided Search Engine Marketing is right for you. The simple answer to this is start with the big ones. As of the writing of this chapter, 73% of all online searches in the United States are performed on two search engines, Google and Yahoo. If you do nothing else with search engine marketing, you should advertise on these two. After Google and Yahoo, there are two

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- ✓ Search Engines
- ✓ Email
- ✓ Online Advertising
- ✓ Affiliate Marketing
- ✓ Viral Marketing
- ✓ Blogs
- ✓ Web Analytics
- ✓ Designing an effective website
- ✓ Building a successful online store
- ✓ Making money from your website or blog
- ✓ Becoming profitable
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more that account for another 15%, MSN and AOL. Almost 90% of all searches are performed on these four search engines. (source: Nielsen NetRatings July 2006)

After you have bought keywords on the big search engines, you can look into specialty search engines that focus on the niche you are targeting. For example, if you have a restaurant or live music venue, you may want to get listed on Citysearch.com. If you are a Business-to-Business supplier, you may want to list on Business.com.

Step 2: Choose Keywords

The second, and most critical step is to determine which keywords you will buy. There are two parts to this decision. First, you must identify the words and phrases that best describe the content on the web pages where you want to direct traffic. Next you must identify what words and phrases web users are most likely to enter as search terms when they are looking for content related to your web pages. The basic rule is to find as many variations as you can on the words and phrases you identified as being relevant to your web page. Then try to figure out which are the most likely variations web users will search for. These are the keywords you want.

Some search engines will show you suggested variations to the terms you've selected. They also may be able to tell you which terms are most popular.

Now here is an important point. You do not necessarily want the most popular search term. If the term being searched most is a very general word or phrase, then you may get a lot of clicks on your link (which

A good keyword is not the one that drives the most traffic but the one with the highest conversion rate and ROI





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you pay for), but they may not convert to sales. It is better to be more specific in your keyword choice. This way you will get clicks from searchers who are more likely to be interested in the specific things you offer on your site.

For example, you may have a business offering legal assistance for small businesses. You could advertise on the very popular search term, "legal services." However, this would be likely to bring a lot of clicks from people who did not need help with their small business. You could also advertise on the popular term, "small business." But then you might get clicks who do not need legal services. On the other hand, if you advertise on the specific phrase, "small business legal services," you will get clicks from searchers who are in the market for your specific services. You will get fewer clicks, but they will convert at a higher rate.

It is not possible to tell exactly what the right keywords for your business will be up front. The best approach is to start with a larger set of keywords as a test. Measure the results in clicks and conversions. Then stick with the ones that yield the best results.

Step 3: Balance Your Budget with Desired Ranking

Once you decide where you want to advertise and what keywords you want, the next step is to decide how to make the best use of your available budget. You will pay more money for a higher rank in the search results. The top listing will cost more than the second listing, which will cost more than the third, and so on. The general rule is that you want to be *above the fold* on the first page of search results. The fold is the area of the page displayed without scroll-

The general rule is to be above the fold on the first page of search results. But only testing can tell your optimum placement





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ing down. However, having the number one listing does not necessarily gain that much over the number two or three. You will only know by testing. You may also find that you get better overall results by paying less for a listing below the fold, or even on the second page.

The best way to proceed is to start with a test using only a small budget. Test a large number of different search terms, on different search engines and at different list order. Run this test for a few weeks and see how your various options perform. Pay special attention not only to click-thru rates but also to conversion rates. With this information, you can run your full program with those terms, search engines and rank orders that performed the best for you.

Step 4: Write Effective Link Copy

The best keywords will only work for you if people want to click on your link when they see it. The next step is to write effective link copy. You have only a few words to make people interested enough to click. This is critical advertising copy. Make those words count.

Link copy should be closely related to the keywords the user entered. Generic sounding links are not very good at enticing clicks. Separate copy should also be written for different variations of your search terms.

Link copy should match the needs or wants of users entering the given search term. When writing link copy, consider why a person might be entering one term versus another. Then tailor your copy to that. Take the example of small business legal services above. Someone entering the term, "small business

*Link copy
is critical
advertising
copy*





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law” may be looking for general information. On the other hand, someone entering, “small business lawyer” may be looking to hire a lawyer. Both may be good prospects for your business. But they will respond to different messages.

Link copy should be clearly related to the content of your website without turning off potential customers. This is a balancing act. Your link should act as a filter that draws in only people who are likely to convert on your website. On the other hand, you may also want to bring in potential customers who do not know yet that they want what you are offering. Once again, you will only find the right balance by testing a variety of options and sticking with the best performers.

Step 5: Use Deep Linking

When people are looking for something on the Internet, they are impatient. They want to be sent directly from the search results to information related to the topic of their search. If people find themselves dropped onto a home page they are likely to just leave and go to the next search result listing until they find what they want. In other words, they expect to be linked from the search results directly to a page deep in your site where they can instantly see what they are looking for. This is called *deep linking*.

Deep linking is especially important when you are buying keywords. Make sure the listings you put out there go directly to the content on your site related to the keyword being searched.

If people find themselves dropped onto a homepage, they are likely to just leave





Step 6: Create Effective Landing Pages

In some cases, deep linking is not enough. You may want to create custom pages for people coming from your link. You customized the copy of your link to match specific needs and interests of people who would be entering a given search term. You may also want to customize the content on the first web page they see. Custom landing pages like this are sometimes called *doorway pages*.

Making a copy of your web page with alternate versions of the ad messaging, images or offer is easy and inexpensive. This can greatly increase conversions from your search engine traffic.

Step 7: Monitor and Improve

Finally, it is essential that you monitor results and continuously improve your program. This is easy to do. The search engine will provide simple reports showing all keyword buys with details about the results each generated. You can then fairly easily set up a report from your Web Analytics software to show the conversions resulting from each.

Behavior on the Internet is constantly changing. Keywords and copy that perform well this month may not next month. You should be constantly monitoring for drops in performance and make adjustments. Also, continue to try new search terms. Slight changes in click-thru or conversion rates can make a big difference in your bottom line.

There are seven critical metrics for Search Engine Marketing campaigns.

It is impossible to know if your SEM efforts are successful unless you measure both click-thurs and conversions





Key SEM Metrics and Typical Areas for Improvement

- | | | |
|-----------------------------------|---|--|
| 1. # of Impressions | → | Measure the reach of your ad spend
Optimize spend for most effective keywords |
| 2. Keyword Ranking | → | Measure results by rank to optimize budget |
| 3. Click-thru Rate | → | Targeting the right keywords
Effective link copy |
| 4. Conversion Rate | → | Targeting the right keywords
Effective landing pages & deep linking |
| 5. Variable Results (by keywords) | → | Targeted versions of link copy & custom landing pages by source
Eliminate non-productive keywords |
| 6. Decreasing Results | → | Freshness of keywords targeted
Updated content on landing pages
Broken links |

By collecting information about these seven metrics, you will know what is working and what is not working. You can then use this information to continuously improve future Search Engine Marketing efforts.

The next section goes into detail about how search engine technology works. If you do not want to dig this deep into the details, feel free to turn ahead to the next chapter.





How Search Engines Work Under The Hood

The key to successfully getting listed on search engines is to understand how natural search works. How do search engines find things people are looking for and how do they choose which results to list first? When you understand this, you will be able to make sure people find your website.

To understand how search engines work, there are really just two key things to learn: *spiders* and *ranking web pages*. Everything else revolves around these two things. Spiders are automated computer programs that *crawl* the Web and read all of the words on web pages they find. These words are then put into a database. The words in the database are organized so it is easy to search in the future. For each word in the database, web pages will be *ranked* to tell which will be listed at the top of search results.

The process of organizing the database to allow future searches is commonly called *indexing*. This is a little bit of a jargon shortcut. Indexing and ranking web pages are actually two separate actions that occur in the database. These will be described below.

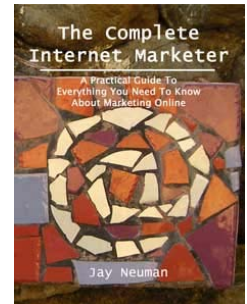
Being successful with search engines is a matter of knowing how to get spiders to find your web pages, what the search engines are looking for when they rank order pages, and how to use that knowledge to get your pages listed at the top.

Spiders Crawl the Web

It all starts with those digital creatures that could only exist on the World Wide Web. *Spiders* are small, auto-

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mated computer programs that search for web pages and read all of the text on each page they find. To make more sense out of just what this means, we need to take a dive into the world of Internet jargon. This is where it starts to get pretty thick.

First, spiders are a type of program known as a *robot* or *bot* for short. Robots are automated programs that are designed to carry out some kind of action on the Web. Usually, this involves searching for some type of information on web pages and then performing some action based on the information it finds. They are called robots, because once they are turned on, they will keep doing what they are programmed to do without human intervention. For example, shopping bots search online stores and can be used to find the best prices on products you are looking for. Search engine spiders simply read every bit of text they find on each page they go to.

So what do spiders do? Well, of course they *crawl* the Web. Here is how crawling works. A spider goes to a particular website. The search engine will send it to the URL of a popular site to start on. The spider reads every bit of text on that web page. Also, the spider will collect some information about that text. For example: is it in a meta tag, is it in the page title or a section header, is it close to the top of the page? Once it has collected all of the information it was programmed to get, the spider follows every link on that page. This way, it will go through all of the pages on that website. It will also go to all of the other websites that are linked to from that site. Once it gets to another website, it will follow the same processes. In this way a spider continues to go from website to website, picking up all of the words on each one as it goes. It is crawling through the World Wide Web.





Filling the Database

What happens to all of that information the spiders collect? It gets sent back to the search engine computers and stored in their database. You can think of the database as being a gigantic list of words. To make sense out of all the information collected, it has to be organized in some way.

Every word on the Web is in there, at least all the ones found by the spiders. For each word, it stores the URL of the web page where the word was found. It also has information about that word as it appeared on the page. Was the word in a meta tag? Then it will show which meta tag it was in (Meta tags will be discussed in a later section). Was it in a subject header on the page? How close was it to the top of the page? Each word, with its corresponding URL and information is a row in the list. If the word appears ten times on a given page, then there will be ten rows for that word with that URL.

There is one more important piece of information that will be stored in the database. For each web page, the search engine will record all of the external websites which link to that page. Remember, the spider gets to a website by following links on other websites. Each time a link takes the spider to a given website, that is recorded in the database. So the search engine knows how many times your website is being linked to from other websites. This will become important when it comes to rank ordering your web pages. Websites being linked to from many external websites are considered more popular than those with few external links.

Ranking Web Pages

Now the spiders have filled the search engine database with a list of words found on web pages. The

Ranking web pages is like a point system. The more points a page gets the higher its ranking in search listings





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next step is to organize the information in the database so it will return relevant listings. All of the URLs associated with each word in the database are rank ordered, so ones where a given word is particularly important to the content of the web page will be listed higher than those where the word just happens to appear there. This is done by assigning weights to the web pages.

Every search engine has its own algorithm for ranking web pages. In general, they all assign weights based on certain information about the word as it appears on the page. Think of it as a point system. The web page gets points, or loses points based on the algorithm. There are four key factors considered by search engines in assigning these points.

1. Meta Tags

Every web page contains sections in the HTML code set aside to give information about what is on the page. These are called *meta tags*. This is where the website creator can tell what the page is about. Information in meta tags is not displayed on the page, but it is read by search engine spiders.

Three meta tags are especially important for every web page: the *Title*, *Description* and *Keywords*. These three tags allow you to categorize your own web page. So it is also the first place search engines look when figuring out which words are most important on that page. There is also a fourth meta tag important for search engines. That is the *Robots* tag. This meta tag allows you to instruct search engine spiders to skip over your web page altogether.

Of course, people are going to look for ways to

Four keys to high search ranking:

- 1. Keyword density***
- 2. Meta tags***
- 3. Position on the page***
- 4. External links***

This sounds familiar





trick the system. Sometimes websites will load a lot of popular terms into their meta tags that do not really have much to do with the content of the page. To account for this, search engines will take away points from pages that have the words in the meta tags but not in the body of the page. Search engines also take away points from pages that simply have too many words of any kind in the meta tags.

2. **Keyword Density**

The second thing search engines look for when ranking web pages is how often the word appears on the page. This is called *keyword density*. In general, the more often the word appears on the web page, the more relevant the word is to the overall content of the page. Therefore, it will receive a higher weight.

However, search engine companies know that some websites try to trick the system and load their web pages with text that is just there to be found by search engines. To get around this, the search engines will start taking away points if the word appears too many times.

3. **Position on Page**

Another way web pages rank the relevance of words to the pages they are on is by where the word appears. The HTML code for the web page identifies subject headers and titles on the page. These will usually be displayed in a larger font, in bold or in a different color. When a word appears in a title or subject header that gives the page more points.





Also, when people design web pages, they want the most important information to be displayed at the top of the page, where people will see it without scrolling down the page. This is called being *above the fold*. Words that appear above the fold are considered more important than those below. But there is no easy way to tell exactly where the fold will be for each page. Instead, search engines give more points for how close the word appears to the top of the page.

4. External Links

Finally, if all else is equal, search engines want to list more popular web pages above pages that are not very popular. They estimate how popular a web page is by how many times it is linked to from external websites.

Once again, search engine companies know that people will try to work the system. A common trick is to set up a lot of useless or redundant websites and have them all link to the main site. Search engines have ways of identifying this trick.

Indexing the Database

As we said above, organizing the database to be searched is often referred to as indexing, or creating the index. *Indexing* is a technical database term. It means to physically re-organize the information in the database. Some advanced mathematical algorithms are used to allow very fast search and retrieval of data records. There are a variety of indexing methods available. Search engines have massive amounts of information that must be searched and retrieved in a matter of seconds. So you can imagine they use

Indexing is a database term that means reorganizing the data so searches run faster





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some of the most complex algorithms available. Luckily, you really do not need to know about them. What is important to understand is how web pages are ranked in the database. It is just a nice thing to know that the database is also indexed to make it run faster. Anyone who actually needs to know about indexing will be a database professional and already familiar with the concepts.

The main reason for discussing indexing at all is to avoid confusion. In the common web jargon, the terms indexing and ranking are often used together. You should be able to know what the two terms actually mean.

Performing Searches

The search engine has an indexed database full of words. All of the web pages where those words appear are rank ordered based on relevance. Now it is ready to be searched. So what happens when you type those words into the search box and click on the "Search" button?

It is easy to see what happens when you enter just a single word. Let us say you want to find information about the Kodak Corporation. You type the word, "Kodak" into the search box and click "Search." All of the web pages where the word Kodak appears have been weighted. So the search engine basically just returns web pages with the highest weight first. But what happens when you enter more than one word? That is when it gets interesting.

To search for more than one term, the search engine uses what is called *Boolean logic*. Boolean logic connects multiple words using connectors such as *and*, *or*, *not*. These are known as *Boolean operators* in computer programming speak. By stringing together multiple

***And, Or, Not
are boolean
operators***





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words into a phrase, using these connectors, the search engine is able to find results based on the combination of all the terms being searched. Doing this basically involves searching for all of the words and then using some kind of algorithm to calculate a weight based on the combination of all of the words. Once again, each search engine will use their own algorithms for calculating weights for the combined search term.

Most people do not use Boolean operators when submitting their searches. They just type in all of the words. The search engine then has to decide how to construct the Boolean expression before submitting the search. Typically, a search engine will try an expression where all the words are present (connected by *and*) first. Then it will look for pages where some of the words are present (connected by *or*). If you want to narrow your search beyond this, you can enter your own expression.

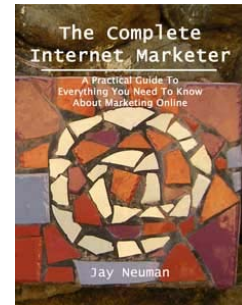
Submitting Web Pages to Search Engines

Now spiders are crawling web pages to build their database of words to be searched. What do you do if you have a small website that isn't being linked to by popular sites? Do you just have to wait and hope the spiders find your website? Luckily, most search engines will allow you to submit your website to be spidered.

Each search engine has its own submission procedure. To submit your website, just go to the search engine where you want to be listed. Their submission guidelines will be posted on the website. If you are using a Search Engine Marketing firm, they will usually be able to do this for you.

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Blocking Robots

In most cases, you want spiders from the major search engines to find your web pages. But sometimes you do not. There are a variety of reasons you may not want some of the pages on your website to be crawled. You may have pages on your website that are still under construction or are simply intended as doorways from specific links. Also, robots look like web users coming to your web pages. They perform actions (e.g. following links) just like web users. They also leave a record in your web logs like regular users. But, robots are not web users. They are little automated computer programs. What if your web pages are running some kind of software that is triggered by the actions of users on the page? The actions of spiders on the page could throw a wrench in your works. Perhaps you just do not want your traffic logs being cluttered with robot traffic. Is there anything you can do about it? Luckily, yes.

Robots usually identify themselves. In most cases, the robots are benign. They are there to perform a legitimate service. Companies have nothing to gain by hiding them. In fact, they want websites to know they are coming. That makes it easier for the websites to optimize their pages to be searched by the robots. This also helps if you do not want to be searched by the robots.

The first good thing about this is it lets you automatically filter out robot traffic from your traffic reports. They are easily identified as robots and can simply be taken out of the calculations.

The second good thing is you can instruct robots to skip web page altogether. There are two ways to do this. First, you can instruct spiders to skip a specific page by including a special meta tag called the *Robots* tag. This simply tells the spider to skip that page.

***Every website
should have a
robots.txt file***





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A better way to block robots is to include a *robots.txt* file in the root directory of your website. This is a simple text file that lists all of the pages you do not want spiders to crawl. You can also instruct specific search engines not to crawl pages on your website in the robots.txt file. By putting this file at the root directory of your website, robots can easily find it. It is the first thing they look for. Some search engines require a website to have a robots.txt file or else they will not crawl the site. It is, therefore, a good practice to have the file present even if there is nothing in it.

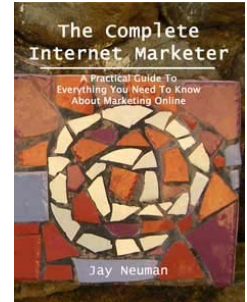
Conclusion

In this chapter, you have learned how search engines work and the difference between natural search and paid search. You know how to be successful using Search Engine Optimization and Search Engine Marketing to drive traffic to your website.

Now turn to the next chapter and learn how to be successful with Email Marketing.

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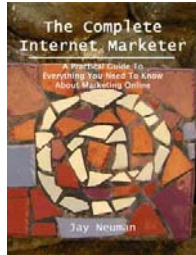


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