Search Engine Optimization
Making the most of your website content

Introduction

While it is relatively easy to create a website, if you want to get the maximum possible potential from your website a little time and planning can really help you build your online presence and develop your brand.

Develop your customer experience

There is no point in generating as much traffic as possible to your site if your customers leave disappointed. Before we start describing search engines and site optimization it is worth checking that you fulfill the following criteria.

Know your target audience

While it is tempting to design your website to suit as many people as possible, in practice you may find that you distance yourself from all people equally. Create personas of your target customers and design your website for them. Once you have your audience using your site you can look at ways at appealing to a larger audience at a later date.

Product placements and descriptions

Ok, you have your target audience visiting your site and finding it fresh and relevant. Now you want to generate some interest in your products and services. We have all been to a website where we have seen a product, but even after reading the description we are not quite sure what it does or if it will be any use. Keep your target audience in mind, while it is good to show technical information about a product this should not be your only way of describing it. While listing the attributes of a product is a good idea, the attributes without a description of the associated benefits will not help you to sell your products in the most effective way. For example, let's take a look of the attributes associated with a digital camera.

- 8.1 effective megapixels resolution

- Smile Shutter with adjustable smile threshold setting
- Enhanced Face Detection with high-speed subject tracking
- BIONZ processor
- Double Anti-blur with Super SteadyShot image stabilization and High Sensitivity ISO 3200
- D-Range Optimizer

Reading this I'm still not sure if this is a good camera or not, but let's explain the benefits to the customer in a simple way and see if we can make the product more appealing.

- 8.1 effective megapixels resolution for clear enlargements up to A3 size
- Smile Shutter waits until the subject smiles before firing the shutter with adjustable smile threshold setting
- Enhanced Face Detection with high-speed subject tracking for clearer portraits
- BIONZ processor for enhanced image quality and fast response
- Double Anti-blur with Super SteadyShot image stabilization and High Sensitivity ISO 3200 for clearer handheld shooting in low light
- D-Range Optimizer adjusts exposure and contrast in high contrast and backlit scenes

Now I can relate to this a lot better, and now know what this product will do for me. Just as high street stores spend a lot of time and money designing their window displays and showing their products in the best possible light, placing and branding products on your website is equally important.

Don't stop your customers from purchasing from you!

Offer support and guidance on your site, so customers know where they can get help if they want it. Once a customer decides to purchase a product, make it easy for them! Although this sounds like common sense, there are still many companies that don't do this particularly well. People purchase on the internet for convenience, so it makes sense to make the process of purchasing from you as convenient as possible. Keep forms simple and supply easy to use payment methods.

Getting your site seen

Once you have your site up and running, your next challenge is to get visitors to come to your website. There is no guaranteed method for making your website popular but there are a number of techniques you can use to improve your search engine rankings.

While we can show in very general terms how search engines work, and what you can do to improve your search engine ranking, the precise algorithms search engines use are closely guarded secrets and tend to get updated on a regular basis. For this reason, while we can also offer tips and guidelines to improve your websites popularity, if search engine rankings are important to you or your business you may be better off recruiting the services of an individual or company specializing in this area and who keeps up to date with these trends on a full time basis.

Before we look at ways of getting your website noticed by search engines, it is worth spending a little time understanding how search engines work, and looking at the factors that may influence your search engine rankings.

How does a search engine work?

While traditionally the term "search engine" was used exclusively to describe crawler based search engines that created their lists automatically, the term is also commonly used to describe human powered directories, or a combination of the two.

Human powered directories

As the title suggests, a human powered directory employs humans to check and add a site to their directory. Typically, you submit your site to a human powered directory including a brief description of your site. It will then get checked and added to the directory. Changing content on your site will usually have no impact upon the relative position of your site within the directory.

Crawler based search engines

Crawler based search engines use programs to search the internet and report back any content they find. These programs are often called "spiders". Once they have found a website they will look at all the pages and follow all the links within the website. It is usual for the spider to revisit the site every month or so to check and report back on any changes.

Once a site has been "spidered" it will send all the relevant information regarding a website to a huge database (called the "index") for processing. Finally, another program will trawl through the millions of pages that have been stored in the index looking for matches to searches, and ranking them in order of relevance.

It is this last section that is a closely guarded secret, and will differ slightly from one search engine to the next. In addition, the way this program ranks the millions of pages is often changed. This, and the fact that every other website is attempting the same thing, is what makes website optimization a specialized and challenging profession.

Hybrid search engines

Hybrid search engines will use a combination of both the human and trawling methods described above to create relevant searches. For instance they may display human powered listing, but also display trawler based results for obscure or particularly specific queries.

Submitting your site to search engines

As we have seen, there are two types of search engine that you can submit your site to. Submitting your site to a human powered directory will involve you filling out a form, and can involve a small fee. Crawler based search engines check links from other websites, so if another website is already linking to your new site the likelihood is that your site will be "spidered" and indexed with no intervention from yourself within a few months. This is the easiest and "most natural" way to get your site indexed by search engines.

You can speed this up, by manually submitting your site to crawler based search

engines, but there are no guarantees this will get your website indexed. You can manually submit your sites to major search engines at the following links:

- **Google**: http://www.google.com/addurl/
- **Yahoo**: https://siteexplorer.search.yahoo.com/submit
- **Live Search**: http://search.live.com/docs/submit.aspx
- **AOL**: http://www.dmoz.org/add.html

Speeding up the process

A few search engines supply a fast track submission scheme where you pay the search engine money and they will index your site for you quicker than normal. This is becoming less common however most search engines will offer some sort of "sponsored links" scheme, in which you pay the search engine each time a customer clicks on a link to your site, in return they will place you in a prominent position within their searches. Based upon keywords you choose.

More information on this is available in the chapter Search engine PPC advertising on page 18. However, if you are interested in getting your website seen as quickly as possible, this may a good method to use.

Optimizing your site for crawler based search engines

We have seen very briefly how search engines work, however, we have not yet covered how search engines rank websites, let's take some time to look at what search engines look for when raking websites, and what you can do to get the maximum possible performance from our site.

Designing your site with search engines in mind

While websites are designed to look appealing to humans, it is also worth considering how it will look to search engines if you want to achieve the highest possible rankings for your website. There are a few differences in the way that humans and search engine spiders look at your website. While you should always keep designing your website for humans, there are a few things worth considering to help spiders find the

content they need to evaluate and rank your site.

Spiders read the code of the website, not the image through a web browser.

While your site may be designed to perfection, how pretty is the coding behind it? HTML can quickly look complicated and cluttered with design rules and styles. Using CSS to style your web pages is much more efficient, makes your pages lighter, and clears away the clutter, allowing the spider to concentrate on the content of your site rather than the design style.

Spiders read text, not images.

Spiders cannot see an image or a flash file and will not interpret them. If you have something important to say, make sure that it is in the content of the website. Websites made completely from Flash may look impressive, but if spiders have no idea what's going on they are not going to be able to evaluate your site. If you are displaying images on your site you should use an <alt> tag that will show a description of the image. Spiders (and software to help the visually impaired) will be able to read these tags and get a description of your image.

> **Quick tip:** The "Google Image Labeler" is a good way of seeing image labeling in practice. It can be found at:
> http://images.google.com/imagelabeler/

Frames confuse spiders.

In order to optimize your ranking with search engines, try and avoid frames wherever possible.

Design each page.

Remember that search engines do not rank websites, but individual web pages. Remember to spend time on each page, tailoring your tags to match the content on each page.

Make the site lean.

Similar to using CSS, as described above, remove any extraneous code from your website and optimize it for web use. If possible, move any scripts to the foot of your webpage, keeping your web content at the top.

Photos have a much higher resolution than customer's monitors, so you can reduce the quality of these without affecting their appearance online. This will reduce the file size and customers will be able to download your site much quicker.

Quick tip: If you do not want spiders ranking part of your site you can use a robots.txt file to advise the spider not to look at certain content. There are many articles relating to the use of this file online and Google offer a robots.txt validator as part of their webmasters toolkit. It is available at: https://www.google.com/webmasters/tools/dashboard

This is only a very brief overview of designing websites with search engines in mind, and more information can be found on the internet. A few good places to start are shown below.

Google's information for webmasters:
http://www.google.com/support/webmasters/bin/topic.py?topic=8522

MSN Webmaster reference guidelines:
http://search.msn.com/docs/siteowner.aspx?t=SEARCH_WEBMASTER_REF_
GuidelinesforOptimizingSite.htm

Yahoo! Search content quality guidelines:
http://help.yahoo.com/l/us/yahoo/search/basics/basics-18.html

Keywords

Choosing keywords for your site always appears easier than it actually is. The first thing to consider is what search terms people may use to search for your site. It is always best to ask a few friends what keywords they may use as quite often you will find them different than the keywords you were expecting. The other thing to take into consideration is competition from other websites. Some keywords are hotly contested by many of the largest companies in the world. If you ran a second hand book store in Edinburgh for example, initially you may want to concentrate on the keyword "books". However you will also be in competition with books.google.com, barnesandnoble.com, nytimes.com, abebooks.com and amazon.com. While you are

technically on a level playing field with these big companies, they can afford to hire teams of dedicated specialists working on keeping their rankings as high as possible. If you want to spend some time running your business then it may be better to concentrate on other areas.

'Books' is a very generic term encompassing a number of products that you may not supply anyway, so by specializing with your keywords you will be able to compete in a less heavily contested market for services that more match your services. The keyword phrase "rare books" or "classic books" will be easier to work with when trying to achieve high rankings in these slightly more specialized searches.

Choosing your keywords is always a balance between having keywords that customers use, and keywords that you can compete with in the market. If we take the previous example for instance, we may have considered "precious books" as a good keyword. This would be very easy to attain high search engine ranking for, but what's the point in having a high ranking for "precious books" if no-one will use these keywords to make a search?

As with most search engine optimization, there are no specific rules that will govern what are the best keywords to use for your site, choosing the best keywords for a site comes with experience, knowledge of competing sites and sometimes, trial and error. There are tools available that will help you to choose your perfect keywords, such as:

http://www.seochat.com/seo-tools/keyword-difficulty/
This site allows you to see how difficult it will be to rank a keyword or phrase.

http://www.webconfs.com/keyword-playground.php
This page allows you to see the popularity of a keyword of phrase, to judge how effective a keyword may be.

http://www.webconfs.com/website-keyword-suggestions.php
This site inspects your website and will offer some suggested keywords for checking and consideration.

http://www.google.com/webhp?complete=1&hl=en
Google suggest will not only show how many sites will appear for a particular keyword, but will also offer search suggestions as you enter your keywords.

Once you have your chosen keywords, the next step is to start using them.

Meta tags

Though some search engines use meta tags others now ignore them. You don't loose anything by adding them, but also remember tags alone will not make your site rank higher than your competitors, as with anything else, meta tags are one tool among many in the search engine optimizers toolbox.

Meta tags are usually added to the header information and are written in HTML. There are three main tags that you can use. Let's have a look at each type in turn and see how it affects your site.

Title

While not strictly a meta tag, this is a very important tag to include in your website. It also makes your website appear more professional as any text you add here will appear in the title bar of the web browser.

Search engines will look at the title and use this to build their impression of your site. This will also influence your site description when appearing in search listings.

The title tag will also appear in the favorites list, if a customer bookmarks your site. The title really has an impact on the impression customers and search engines have on your website, so it is worth spending a couple of minutes in getting it right. Ideally it should incorporate a few key phrases into a brief introduction of your site.

For example, Bobsbeekeeping.com may want the title of "Bobs Beekeeping – Making honey the traditional way". You can change the title for each page, so for an article on beekeeping you could use "Bobs Beekeeping - tips and tricks for making honey".

This would be added into the top of your page as follows…

```
1   <head>
2   <title>Bobs Beekeeping – Tips and tricks for making honey</title>
3   </head>
```

Meta Description

The meta description tag will allow you to influence the description shown in some organic search engine rankings.

Some search engines will ignore this tag and generate their own description. However enough search engines still use this tag to make creating a description worth while. Like the title tag, this should be a brief description of the web page, and should ideally be under 250 characters.

In the above example we may have a meta description of "Tips and tricks for all aspects of bee keeping and honey making. This page offers help and advice for anyone interested in bee keeping for both the hobbyist, and the honey making professional."

So let's add this into our HTML header information, along with the title tag we created earlier…

```
1   <head>
2   <title>Bobs Beekeeping – Tips and tricks for making honey</title>
3   <meta name="description" lang="en" content="Tips and tricks for all aspects of bee keeping and
    honey making. This page offers help and advice for anyone interested in bee keeping both for the
    hobbyist, and the honey making professional" />
4   </head>
```

Meta Keywords

While this used to be an important part of search engine optimization, these days many search engines will ignore any Meta keywords within your website. However if you have been reading this tutorial from the start we will have already created our keywords for the website. As we already know the keywords we want to add, and some search engines still use this information, it would be foolish for us to ignore this field completely. So let's add our keywords to the HTML header information.

```
1  <head>
2  <title>Bobs Beekeeping – Tips and tricks for making honey</title>
3  <meta name="description" lang="en" content="Tips and tricks for all aspects of bee keeping and
   honey making. This page offers help and advice for anyone interested in bee keeping both for the
   hobbyist, and the honey making professional" />
4  <meta name="keywords" lang="en" content=" bee keeping, beekeeping, keeping bees, bees uk,
   bobs bees, bee wax uk, traditional honey, bobs bee keeping, bobs beekeeping" />
5  </head>
```

Website content

Now that we have our metadata and we know which keywords or phrases we are going to target we can concentrate on optimizing our website for search engines. We have mentioned briefly how search engines work, and how "spiders" crawl through your site looking for content. As well as the meta data described above, these spiders will also look at the first paragraph or so of text on each page, and this will form a part of how your page ranks for your chosen keywords.

Most search engines these days will ignore the meta keywords, but will generate their own, based upon the opening lines of your website. This is a tricky area to get right, as you have to use your keywords, yet still make the opening paragraph clear and readable for your customers.

Search engines will read the opening paragraph, and remove common words, such as and, at, there etc (A list of words that search engines exclude is available at http://www.webconfs.com/stop-words.php). They will then analyze the remaining words and work out the relative importance of what is left. The importance of certain words is worked out by looking at two factors: location and frequency.

- **Location**: Search engines work on the theory that anything relevant to your website will be mentioned at the top of the webpage, and any information that's further down the page will be less relevant to the actual site content. The closer to the top of a page the text is the more important it will appear to

a spider.

- **Frequency**: In a similar manner, if a word if important to a website, it will probably be mentioned frequently. The more frequently a word is mentioned the more important it must be.

With this information the search engine will then create keywords that will best fit its perception of your site.

> **Important:** From the descriptions of search engine behaviour shown above, it would seem that all you have to do to get a high ranking will be to add your word to your site as many times as possible. In the past website designers have attempted to "influence" their search engine rankings by repeating a word over and over again in the same colour as the background of the site. This would be seen by spiders, but not by any customers visiting their sites. This practice is known as keyword spamming, search engines will look out for this behaviour and will penalize (or even expel) web pages that are considered to be doing this.

So, to optimize your website for crawler based search engines, you need to get to the point quickly, using keywords or phrases that customers are likely to use to find your site. A good example of this can be found at http://www.apple.com. If you look at the words used in this site, and the number of occurrences, you will find the following:

Keyword	Occurrences	Density (%)
Apple	7	11.4%
Store	3	4.92%
Ipod	3	4.92%
News	3	4.92%
Hot	2	3.28%
Shuffle	2	3.28%
Downloads	1	1.64%
support	1	1.64%

All the words people may use to find their site are mentioned frequently on the home page. By carefully wording the content on your website you can go a long way towards getting good search engine rankings. Once you have written the content for

your website you can check the keywords of your site with a "keyword density checker", like the one available at: http://www.webconfs.com/keyword-density-checker.php.

> **Quick tip:** Remember you are writing this content for humans, not search engines. If your content is interesting and relevant the keywords will fit naturally.

Links

As well as generating keywords for your site, search engines will also look at how your site fits in with the rest of the internet. They particularly dislike dead ends on the internet, so at the very least, you should ensure that each page on your website will link to another.

Links within your website

Check the links within your website. Spiders will follow all the links within your website, so provided that all the pages of your site link together you can be confident that spiders will be able to index each page of your site. A site map is a good way of making sure that you have multiple ways of linking your different pages together. As well as being useful to your customers who may be visiting your site for the first time, or looking for something specific, once a spider has found your site map, it is easy for it to follow the links in the site map for index each page on your site.

Links from other sites

Earlier we mentioned how if a website links to your site crawler based search engines will naturally find your website and index you with no further action needed on your part.

When we were explaining how search engines work we discussed links to your website and tips on improving the number of links to your site. However search engines don't just look at the quantity of links to your site, they will also check the quality of these links. To judge the quality of a site search engines will measure two things. Relevance and authority.

- **Relevance of links** – Whenever a website links to your website the search engine will check the description of the link, and check the text surrounding the link. It will then check to see if the link is actually relevant based upon this information.

  For example if you has a link to bobsbeekeeping.co.uk at the end of a story regarding cars, and the link was called "Click here to see the new Aston Martin", this link would have a very low relevance. However if you had a link at the end of an article relating to Bees, and the link was called "Further information on beekeeping is available at bobsbeekeeping.co.uk" then this link would be far more relevant and score higher with search engines.

- **Authority of links** – Not only is the description of your link and the content surrounding it analyzed, but the site linking to yours is also questioned and taken into account. From reading the site the link originates from search engines can build up a profile of your site. In addition, links that come from highly ranked sites are deemed more important than links from less well ranked sites. So, a link to bobsbeekeeping.com from yahoo would be deemed more important than a link from bobsdomain.com.

Quick tip: Originally search engines just looked at the quantity of links to a website. However as people became wise to this large "link farms" were created (essentially, just a large list of links). Webmasters could subscribe to these link farms and boost their website rankings accordingly. Search engines adapted to this and if you are found to be using a link farm these days your rankings are likely to take a sharp drop.

There are many ways of encouraging people to link to your site. Here are 5 tips to help you build links to your website.

1. **Have a site that people want to visit!** Write interesting articles and provide unique information or tools in your site. While a well thought out and interesting article may not directly generate sales to your company, people will link to it, adding more visitors to your website and improving your rankings.

2. **Sign up for directory services and listings relevant to your website.** There are many websites that offer a directory listing relevant to your site. Sign up for them and get yourself known.

3. **Join the community!** A natural and effective method of adding relevant links to your site is to participate in the community that you are targeting with your website. Join some forums and discussion groups; not only will you be able to keep in touch with the issues and needs of your chosen market group, you will also get your name in the minds of your target audience.

Quick tip: Rather than blatantly advertising your website, contribute and be informative, with a link to your website under your name in your signature.

4. The least taxing way it to find other sites similar to your and ask them to add a link to your website. This can often create a few quality links with little effort (although you should reciprocate the favor by adding a link to their website from your own). You should be careful that these are relevant sites.

Important: If you enter a link exchange, you must ensure that the website you are linking to is reputable. If you link to a website whose actions result in them becoming excluded from search engines, your own ranking will also be harmed.

5. Add tools to your site to allow visitors to submit your site to some of the larger online communities. Communities such as Digg, Stumble, del.icio.us, Facebook and Twitter have large followings, getting an article recognized in one of these groups can direct a large amount of traffic to your site (which often creates a knock on effect with other communities following the trend). While members of these communities will know how to bookmark a page, just making it easier for them and reminding them can be a great help.

Stumble It!   Digg this!   Add to del.icio.us

Checking links to your site

Each search engine has tools available to help you check links to your site. In Google for instance, you can enter site:<domain-name> into the search bar to see all the sites that link to yours. Alternatively some sites such as http://www.linkpopularity.com/ will have a free tool you can use to check how many links you have ranked with different search engines.

Finally, there are tools available that will help you to build up a number of relevant links to your site. Once such tool is http://www.webconfs.com/backlink-builder.php

And finally

The precise techniques that search engines use to rank websites are closely guarded and change often, as you can see from the above, there are no set rules you can use to gain instant rankings, but there are a number of steps you can take to help you along the way. Remember, the final condition that search engines use is "clickability", even if you have the number one ranking website, if no one clicks the links to your site it will loose rankings, and even if you have a terrible site as far as search engines are concerned, if you have enough visitors, then you will go up the rankings.

While search engine Optimization will keep looking at ways of improving rankings, and search engines may keep adapting to spot these techniques and stop them from operating. One guaranteed way to keep your site highly ranked during all this time is to create a website with great content that people actually want to visit and be an active member of the community. If people love to visit your site and know where to find it, you will do well.

Advertising Techniques

There are two main ways of advertising on the internet, you can advertise in search engines, or within other people's websites. How you pay for these adverts is usually similar which ever technique you use.

Generally with online advertising you will pay a one off "activation fee", and then pay a small fee each time someone clicks on one of your adverts. For this reason this is generally called "pay per click" (PPC) advertising. This form of advertising allows you to target your intended audience much more specifically than more traditional forms

of advertising. In addition, as you only pay when a customer follows a link to your website you tend to get better value for money than blanket marketing campaigns.

Search engine PPC advertising

Most search engines have both "organic" and "paid" listings. It can take some time and a lot of work to appear in the organic listings, but paying for online advertising can add you to the paid listings of a search engine very quickly. The following diagram shows the Google results after searching for "*car insurance*". The paid listings are shown in purple. While the organic listings are in the bottom left of the screen.
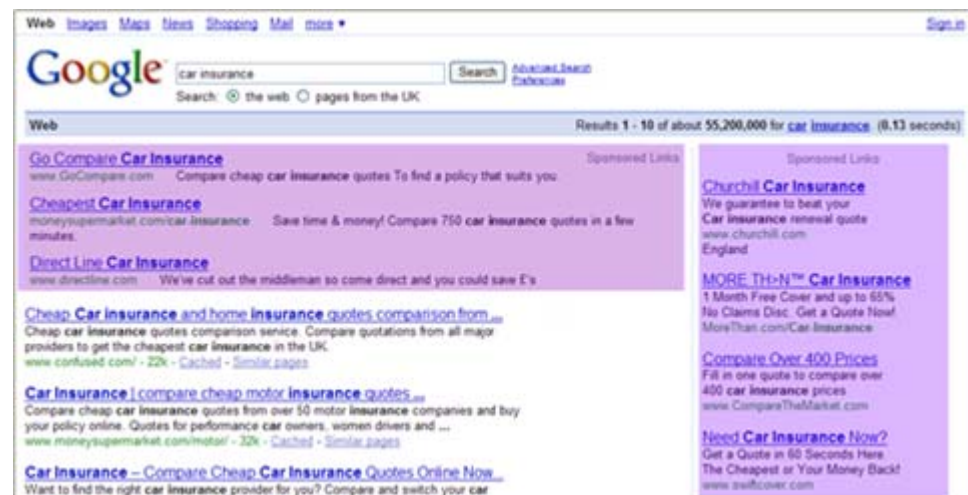
The difference with this method is that you are able to target the audience that is most likely to use your product, rather than spending part of your budget advertising to people who will not be interested. Microsoft AdCenter for example has a wide range of conditions so if you have a website for your Pizza delivery company in New York, you could choose to advertise only to 15-40 year olds living in New York during the hours of 16:00 – 23:00. Again, this method will cost you money, but if it's important that your site is listed high up in the results, and quickly, then this is another option open to you.

More details on this type of advertising may be found at the following links:

- Microsoft AdCenter:
  http://advertising.microsoft.com/uk/Advertise/default.aspx?pageid=903

- Google AdWords:
- http://adwords.google.com/select/Login

- Yahoo! Search marketing:
  http://searchmarketing.yahoo.com/en_GB/arp/sponsoredsearch_v3.php?o=GB0338

- ASL (Ask sponsored listings):
  http://sponsoredlistings.ask.com/sponsored_listing.php

Other PPC advertising techniques

These companies will usually follow the same PPC model as search engine PPC schemes, however, rather than advertising in search engine rankings, your adverts will appear within consenting websites. You generally have more control over the type of advert you can display (images, text, banners or videos for example), so this type of advertising is good for promoting brand awareness.

There are many companies that support this type of advertising campaign. We are unable to recommend a specific company, but if you search for a few online you should be able to find one that will suit your needs.

Keeping track of your website rankings

No two websites are the same, and once you have got your website online you will want to monitor it, and tune it for your customers. Luckily there are many tools available which will provide you with a wealth of information on your website, allowing you to analyze the performance of your site over time and make adjust your site as necessary to improve your customers' satisfaction, and attract more visitors. You can also monitor the popularity of different content on your site and develop new content based upon what you know to be popular.

The page strength tool at: http://www.seomoz.org/page-strength/ will analyze your site and provide you with a comparative indication of the strength of your site, giving advice on areas where your site does well, and areas that could be improved.

You will not gain instant rankings in organic search engine listings. Good organic rankings take time and effort; you can monitor your progress at: http://www.urltrends.com/.

Further reading and useful tools

Google webmaster tools. A selection of tools to help you analyze your site and how customers find your site:
https://www.google.com/webmasters/tools/dashboard

Google webmaster guidelines explained: http://www.feedthebot.com/guidelines.html