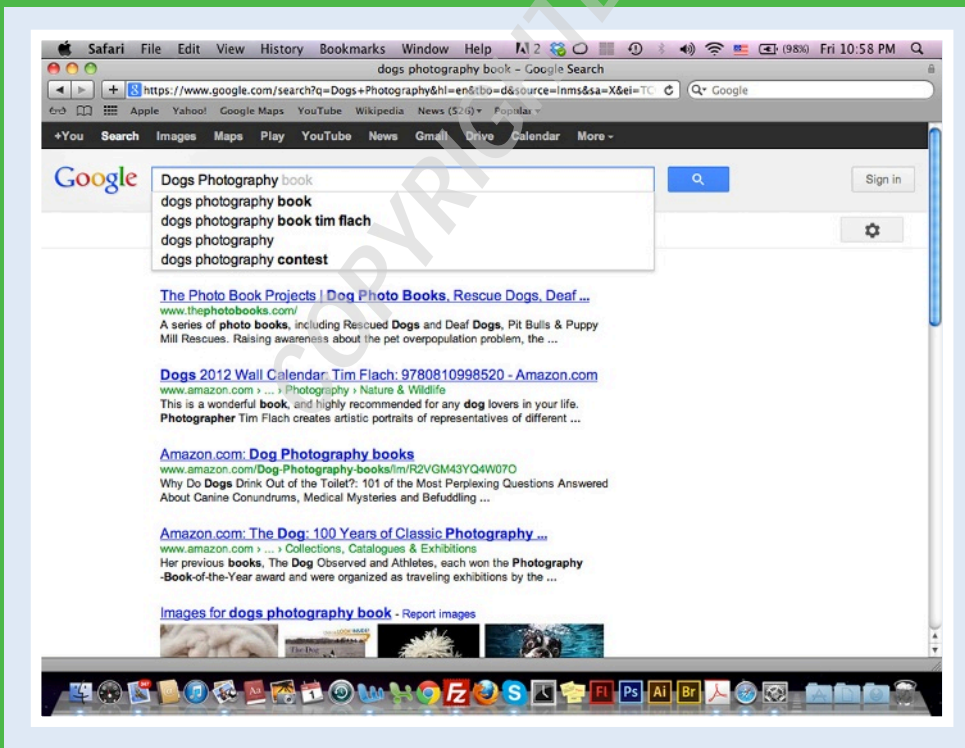# Understanding the SEO Process

When you have a website or a blog, most of your visitors find you using a search engine. The search engine user types his keywords or questions and the search engine displays the results from the indexed web pages that are relevant to the user search. Optimizing your website for search engines can help bring more traffic to your website and help it achieve better rankings in different search engines.

Introducing Search Engine Optimization

*S*earch Engine Optimization (SEO) refers to methods and techniques that you can apply to a website to increase its traffic, rank, and visibility in a search engine's results page. When you optimize your website, it has a greater chance of appearing in the search engine top results, which subsequently increases the traffic to your website. The optimization process includes many techniques and methods that are applied to the website itself or other sites that are related to the website content. Understanding the SEO process requires learning about how the search process works, the search page layout, and the different search engines that you target in the process.

Discover What SEO Is

Search Engine Optimization, SEO, is a process that you apply to a website to increase its rank and traffic from *organic search engine* searches. The process targets the free search, where users use any of the existing search engines, such as Google, Yahoo, and Bing, to search for a product, service, or information. It is different from a paid search, where the *webmaster* pays to appear at the top of the search pages, as discussed in Chapter 11.

Explore a Brief History of SEO

The process of optimizing web content first occurred in 1990, when search engines began indexing websites' content. It was much simpler than today, where website owners submit their sites to search engines. The search engines started and continue to use computer programs called *web spiders* or *crawlers* to crawl a website's pages and index them based on the site's niche and keywords. Early SEO was as simple as adding *meta* tags, which are HTML codes that include information about a website. Meta tags help search engines determine how the website content will be indexed using data such as the site's title, description, and keywords.

Look at the Google and SEO Relationship

With the launch of the Google search engine, the SEO process became more complex. It was developed to ensure better and more accurate indexing as well as identify the misuse of search engine optimization tactics such as keyword *stuffing*, which refers to including irrelative keywords in a web page to mislead the search engine crawlers. Then, Google started to refine the search technology by adding more factors for indexing and ranking websites. For example, *Off-page* optimization factors include external links to the website, and *On-page* optimization factors pertain to the website structure and content.

Searching...
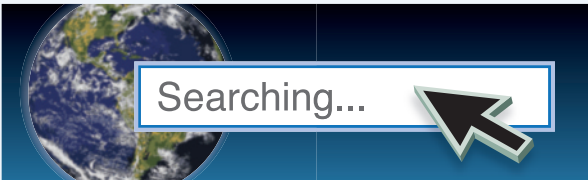
Apply SEO to a Website

The correct and standard use of search engine optimization techniques, which is known as *White Hat SEO*, helps put your site link at the top of the search engine results. Subsequently, this drives more traffic to your website and produces higher rankings. On the other hand, misusing search engine optimization techniques may negatively impact the site's indexing and ban it from appearing in the search engine results, which is known as *Black Hat SEO*.


Information ...

YourSite.com: information you need
wwwyoursite.com › information › information you need

Compete Using SEO

With the ever increasing amount of content on the web, gaining visibility has become very competitive and it is harder to reach the top of the search engine pages and be easily identified by search engine users. Thus, this heavy competition makes optimizing your web content for the search engine a necessary process to ensure good indexing and a high ranking. SEO is an essential step after building a website, and as important as the website design and development.
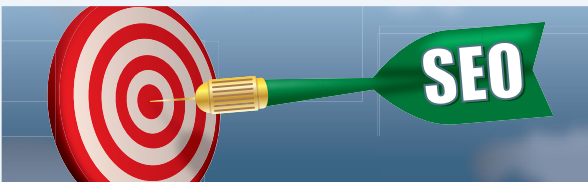
Explore SEO Resources

You can find many articles and resources on the web that cover the search engine optimization process. However, these articles alone will not give you a full understanding of the SEO process. While the articles provide tips and points of view, it is a good idea to use a structured guide such as this book along with hands-on practice and experience. This combination can help you gain a better understanding of the process and learn how to apply its different aspects to reach your search engine optimization goals.

Consider SEO Techniques

Search engine traffic is one of the greatest factors for success for your website, because you can turn this traffic into potential clients or website followers. The SEO process includes a number of techniques that you need to apply in parallel to move your website to the top of the search engine rankings and drive traffic to your website.

Search engine optimization techniques include different on-site and off-site strategies, which are known as On-page and Off-page optimization methods. Each type of method is very important and required to achieve successful SEO.

Apply On-page SEO

The On-page SEO techniques applied to the website itself make it search engine friendly. On-page simply refers to the optimization methods applied to the website or blog pages that will appear in the search engine results when the user types specific search terms. These methods are the first step in the optimization process when you are creating your website. Designing your website starts as early as when you are choosing your business or website name and identity. On-page SEO techniques include choosing a suitable domain name for the website, which is what users will type in their browsers to reach your website. It also includes creating the *meta tags* added to the HTML code that contain information about the website, such as its title, description, and related keywords, as well as optimizing the content heading, site content loading speed, keywords, site navigation, and site design structure. Although the On-page SEO techniques do not drive direct traffic to your website like the off-page SEO techniques, it makes the site content easier to reach by the search engine crawlers. It helps to categorize and index the site pages easier and faster than websites that do not apply these techniques.

Apply Off-page SEO

Unlike the On-page optimization techniques, the Off-page optimization techniques refer to the methods you apply outside the website to increase its rank, traffic, and visibility in the search engine. The methods are implemented and have either a direct or indirect impact on the website's traffic and its ranking in the search results. These methods may use third-party tools or websites such as directories and social networking websites to help build links to the website and improve traffic. The Off-page optimization includes link building, which refers to increasing the number of links that point to the website content. Off-page optimization also includes submitting your website to search engines and directories; and promoting it through press releases, articles, and more. You address Off-page methods after you apply On-page SEO and add content to your website. Both the On-page SEO techniques and the Off-page techniques are important to consider when you are optimizing your website. For example, you can use the website social network page on Facebook to drive traffic to a website, while at the same time, the website loads quickly, or the incoming user will leave the website without reading the content.

Discover Search Engine Optimization

The search engine optimization (SEO) process is an important part of your website business. Many website owners and webmasters wrongly believe that only the SEO process can do the magic and put their sites directly at the top of search results. However, the secret behind successful website SEO lies in your complete website management. Search engine optimization is much easier with high-quality websites than lower quality websites. Before I start talking about the SEO techniques, however, you should consider the following tips for getting better SEO results.

Target Your User, Not the Search Engine

When a visitor has a good experience on your website, he or she will return to the website because of its useful content. The number of returning visitors indicates the ratio of repeat visitors compared to new visitors.


■ New visitor ■ Return visitor

Even if you use good SEO, if the website content is poor, the results can be very disappointing; visitors who come to your website via search engines will not return again, which results in useless SEO efforts.
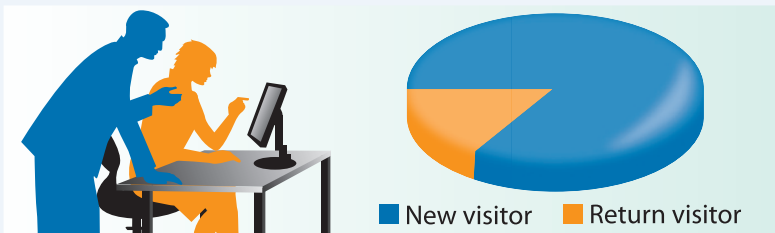
Assign Time Dedication

Optimizing your website is a long-term and ongoing process which takes a great deal of time and effort to see a significant impact on your website. Many website owners fail to achieve their SEO goals because they seek fast results. Planning for the SEO process is covered in Chapter 13. However, before you start to learn about SEO techniques, remember that it takes time for search engines' crawlers to index your website content, which may take weeks.
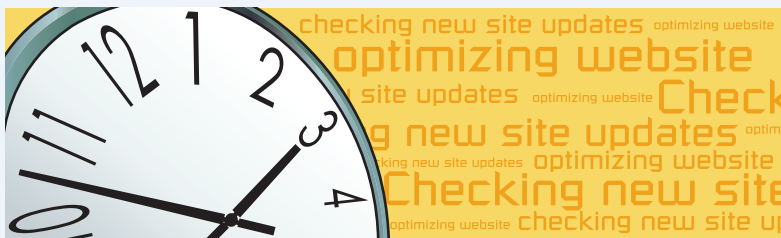
Practice, Practice, Practice

The final tip to keep in mind when you are learning about SEO is that most of the methods covered in this book call for practice and analyzing the results. For example, some techniques are more suitable for specific website audiences than others. So, you need to practice these SEO techniques, apply them to your website, analyze the results, and determine which ones help increase your website traffic and rank.

Understanding How People Use Search

Many users depend on search engines, especially Google, to find what they are looking for. When they do a specific search, they follow general steps beginning with the need to know information or about a service and ending with clicking the results. While having users complete the last step is the ultimate goal, it is important to understand how humans behave on the search page. This knowledge helps you figure out what users search for and how they search for it, and tailor your SEO process appropriately.

Search for Information

You can go to many places to search for information, such as search engines, the *Yellow Pages*, and newspapers. The statistics show that many people go to search engines to find information compared with other methods. This fact indicates the increasing importance of targeting search engines and optimizing websites for it. Actually, many businesses have already started to focus on search engines to improve their websites' traffic and rank.

Mozart fragment recordings

Search

Using the Most Common Search Engines

Search engines use various methods and algorithms to index web content and display it in the search results page. This is one of the reasons users prefer a specific search engine. According to comScore, the market share for search engines in 2011 places Google at the top of the search engines with more than 65% of the market share, and Yahoo is in second position with around 15%.

http://

Begin Your Search

Users usually go through common steps while searching for information on the web. The SEO process starts when the user needs to search for specific information; for example, a user can be searching for local services or businesses. When you do a search on a search engine, you usually provide a specific search query or a number of keywords, and the search engine provides results that you can choose from to obtain relative content.

SEARCH

Turn Your Need into a Search Query

When you do a search, you need to submit your request, or *search query*, as a word or group of keywords, known as *search strings*. The search engine uses these keywords to determine the results that best match your query and displays them in the search results page. In the SEO process, you focus on commonly used keywords when creating your On-page and Off-page optimization plan.

piano and violin • church works • oratorio and oper
divertimenti • ballets • concertos • pantomime •
ind and vocal music • dance • scherzoes • chamber music
• keyboards • ensembles with • voice and piano •
ondo • allegro • horns • sinf rings • Andanti

Mozart fragment recordings

Enter the Search Query into the Search Engine

The user types a request for information or a service as a search query, and then submits it to the search engine using the form that appears at the top of the search engine's web page. In this step, the user chooses between commonly used search engines. Most users use Google as their primary search engine because it loads easily, provides accurate results, and uses sophisticated methods to display the results that match the search query keywords.

London weather, October 2012

Search

View Search Results

The search results that appear on the search engine page are based on the keywords used in the search. These results depend on the crawlers that crawl the websites and index its keywords. The search results consist of two types, the *free search* results and the *paid search*, or *sponsored search*, results. Search engine page layout is covered later in this chapter in the section on understanding search page layouts.

London weather, October 2012

London Weather, October 2012 - forecast for the city
www.londonforecast
London Weather from 1909-2013...Weather for October 2012; 2013; 2014...average temperatures, record temperatures...See
Weather archives 1909-2012...October is wettest month...what to wear, public holidays, average temps

London in October - Weather 2012 - archived forecasts
www.londonweatherarchives
Weather Achives for London - 1887-2013...2012 Jan, Feb, Mar, Apr...October - Weather archives 1887-2012...October events -
the month at a glance - Weather during historical events

Click a Specific Search Result

The user typically scans the search results that appear in the search engine page and reviews the titles and descriptions. If a result meets the user's needs and appears to be the best result, the user clicks it. Otherwise, the user reviews other results. The user can also use the search engine's advanced search options, such as filtering the results based on the date, the type of content, or specific search criteria.

RESULTS

Using Different Types of Searches

While there are different types of search engines, there are also different types of searches that users do when searching for information. The type of search a user does depends on the type of information he seeks from the search process and the query or the keywords he has submitted to the search engine. The three types are information queries, navigational queries, and transactional queries. Understanding the difference between them helps you determine the best combination of keywords to use to optimize your website content for your focused users and website visitors.

Using Informational Queries

The informational search query is used by users who seek specific information, such as the history of a specific country or scientific facts. An informational search usually returns a large number of results, especially when it is common information. In this case, it returns results from large information websites, such as Wikipedia, About.com, and Yahoo Answers. The results of this form of search can be links to websites, encyclopedias, forums, question and answers websites, discussion boards, or academic research PDFs.

London weather, October 2012 🔍

London Weather, October 2012 - forecast for the city
www.londonforecast
London Weather from 1909-2013...**Weather** for
October 2012; 2013; 2014...average temperatures,
record temperatures...See
Weather archives 1909-**2012**...**October** is wettest
month...what to wear, public holidays, average temps

London in October - Weather 2012 - archived forecasts
www.londonweatherarchives
Weather Achives for **London** - 1887-2013...**2012** Jan,
Feb, Mar, Apr...**October - Weather** archives
1887-**2012**...**October** events -
the month at a glance - **Weather** during historical events
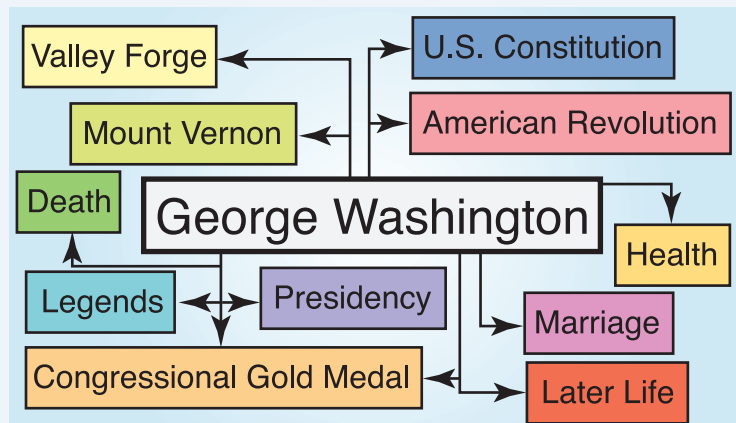
Averages and Records - London Weather, October

Ads

Weather on call
www.weatheroncall
Get the latest **Weather,** road
conditions on your mobile...
London, Reading, Bath, Brighton

**London Weather - download
free app now**
www.weatherapps
Weather updates to your mobile
or computer...24 hour weather
forecasts...updated every 15
minutes. Get your free **London
Weather** app now

Using Navigational Queries

The navigational search query usually provides fewer, but more focused, results because the user does the search based on a company's name or a specific person's name. For example, the user can search a company name such as Samsung or Apple, or a historical figure such as George Washington. The results that appear for these types of queries usually show websites and profiles related to a company or person specifically or websites that have articles or news about them.

Valley Forge • Mount Vernon • Death • Legends • Congressional Gold Medal • **George Washington** • U.S. Constitution • American Revolution • Health • Marriage • Later Life • Presidency

Using Transactional Queries

The transactional search query is an action-based search. When users do a search to buy a product, download a resource, or subscribe to a specific service, they are doing what is called a *transactional search*. Users who do this type of search are usually searching for products to buy, or services to use. For example, a user can search for website templates to buy or download. Or a user can search for travel or car rental services.

Search a Specific String

Many different types of users search for information on the Internet. The experienced user who has a full understanding of the search subject knows the best search term to use to find relative results. For example, the user may use a specific string query such as "How to create a High Dynamic Range image in Photoshop."

create HDR photo in Photoshop

Search the Best Term

Sometimes the user knows what to search for, but cannot find the best term or the best keyword to use for obtaining optimal results from the search process. Therefore, the user navigates among the various results and tries to find the best link to click. For example, if the user is searching for information about High Dynamic Range (HDR) photography and does not know the best search query, the user can use the search term "How to create HDR photo effects."

creating HDR photo effect

Narrow Search Results

In this case, this user does not know what to search for or how to choose the search terms. So, the user simply types keywords to try to narrow the search results and gives clues about the information desired. For example, if the user does not know the best keyword to use when searching for HDR photos, the search term would be "How to create photos with color depth effect."

HDR effects

HDR photos

color depth photos
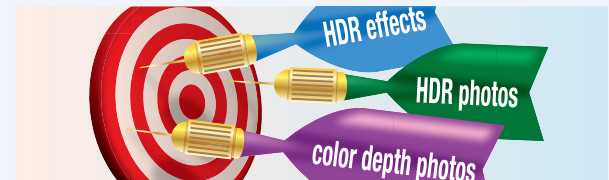
Understanding the Search Page Layout

M ost of the search engines results pages have similar layouts on a desktop and laptop. At the top of the page is the query search box, where you submit or modify your search terms. At the bottom of the page is the *results information* that displays the number of results. In the center of the page, the *organic search* results display related content. In the upper-right of the page are the *paid search* results and advertisements. *Vertical search navigation* results focus on a specific topic, or filter results based on the search type. *Horizontal search navigation* filters search results based on criteria such as time.

Understanding the Search Page Layout

Use the Search Query Field

1 Type **http://www.google. com** in your web browser and press Enter.

2 Click in the search field.

3 Start typing a search term; for example, Adobe Photoshop.

The Google home page switches to the search results page.

4 Continue typing your search term.
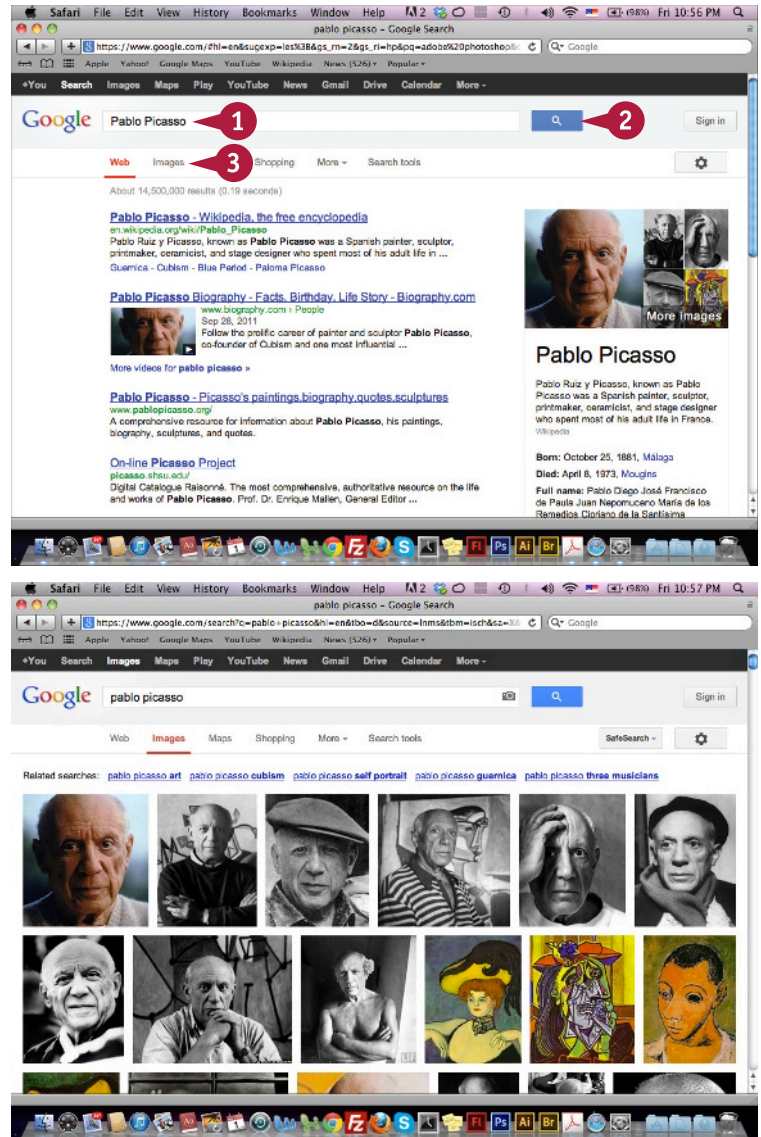
5 Click **Google Search** (🔍).

Your search results appear on screen.
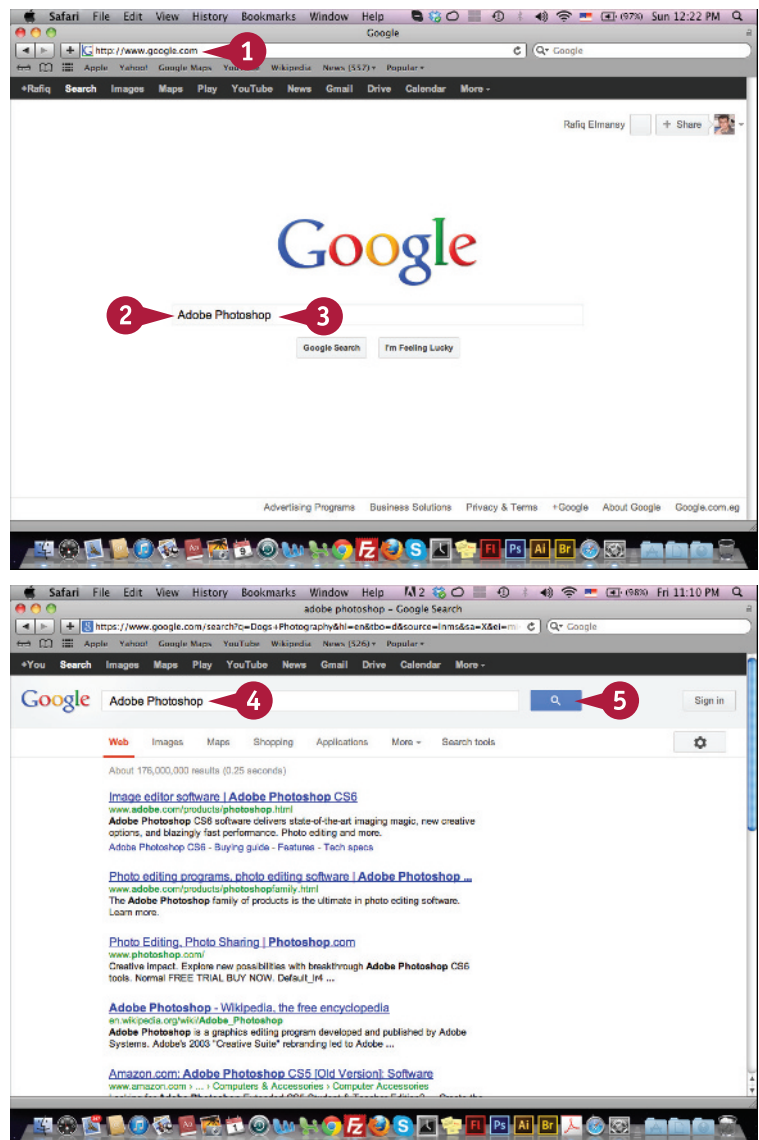
View Vertical Search Results

1 Type a search term in Google search; for example, Pablo Picasso.

2 Click **Google Search** (🔍).

The search results appear.

3 Click **Images** on the menu bar to display a related image search.

Images of your search appear on screen.

TIPS

What are the different vertical search options?
The search for a specific type of media or information is an essential part of the search process. For example, you may need to search for only image results or video results. Thus, the search engine provides multiple vertical search options, such as image, video, maps, shopping, news, books, places, discussions, applications, and more.

Is the search layout different on mobile devices?
Yes, search page layout will appear different depending on the type of device the reader is using. If the reader is using a tablet or smartphone, the vertical search navigation will appear horizontally across the top of the screen in Google.

In addition to the vertical search, the search engine results page provides other tools and options you can use to narrow the results, such as the *horizontal search*. The horizontal search enables you to narrow your search results based on the properties of the search results. For example, you can filter your image search results based on publish date, size, and color. You can also filter video results based on duration, publish date, and quality. You can use these options to increase the quality of the results and reach better results by showing only the ones that meet with your search criteria.

Understanding the Search Page Layout (continued)

View Horizontal Search Results

1 Type a search term in Google search.

2 Click **Google Search** (🔍).
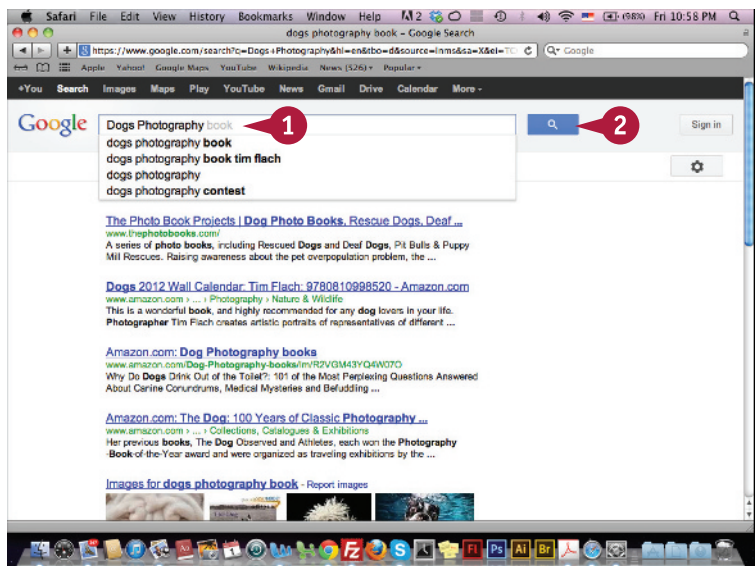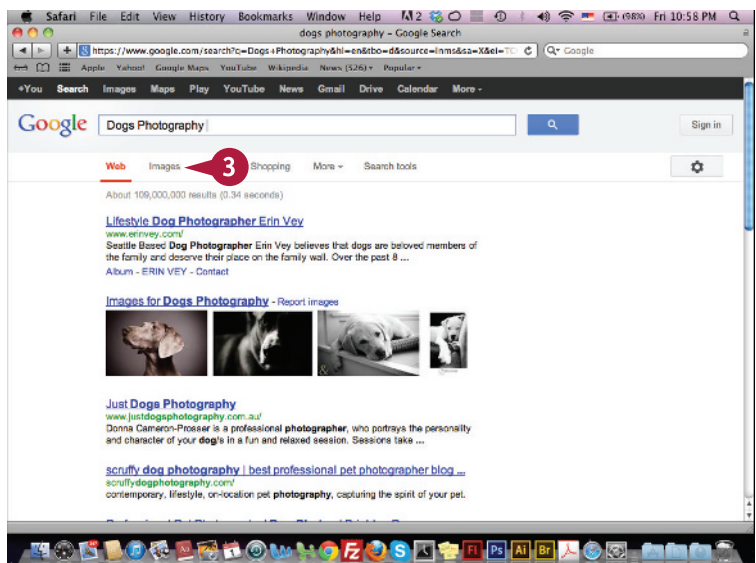
The search results appear.

3 Click **Images**.

The images search results appear.
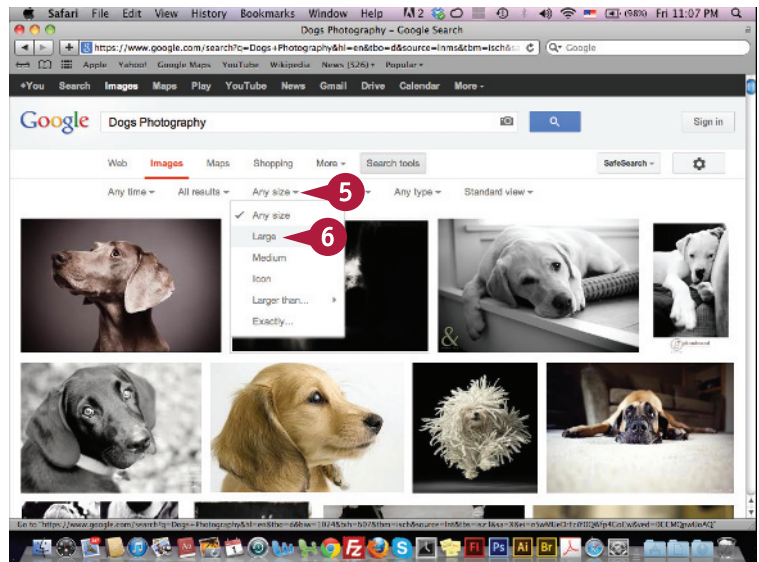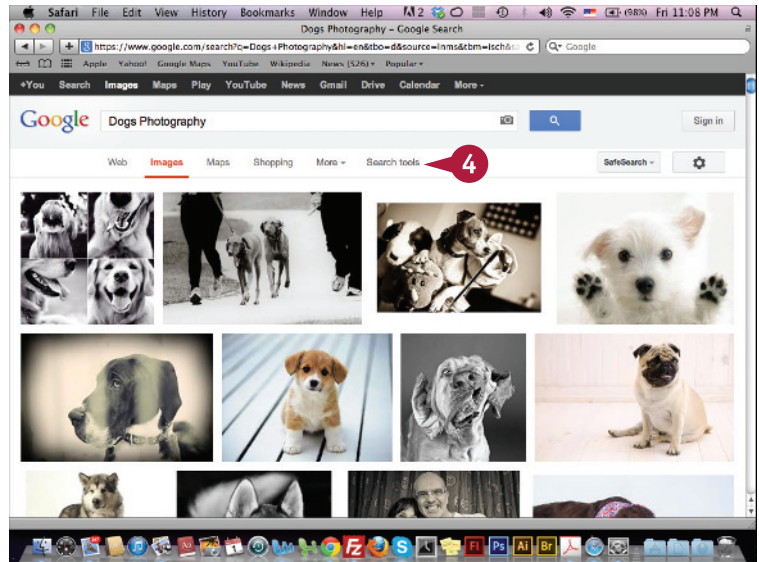
4 Click **Search tools**.

The search tools appear.

5 Click the **Any size** down arrow (⌄).

Note: The Any size option does not appear on a smartphone device. You need to use desktop browser to see this command.

6 Click **Large**.

The image results with large sizes appear.

TIPS

What are the related searches?
When you do not know the accurate search keywords, the search engine suggests more focused keywords, which are known as *related searches*. These keywords help you narrow the search results and allow you to reach results that better meet with your needs. The related searches depend on your search query keywords and common searches by other users.

Why should I use the horizontal search options?
The horizontal search allows you to filter results to display a specific image size or video length. For example, you may need to display videos that are short in length, or display only high-quality videos. When you optimize your media, you should consider how videos will display in your content in the search results.

Explore Different Search Engines

There are many search engines on the Internet, some of which share the same algorithm and techniques and others which have unique algorithms. In order to determine the search engines you need to target in your SEO plan, you have to understand how each search engine works and the potential traffic that you can receive from it. The major search engines include Google, Yahoo, and Bing. While Google is the most targeted engine in SEO, other search engines can provide traffic that can even affect your website Google rank in an indirect way.

Review the Google Search Engine

There is no doubt that Google (www.google.com) is the largest search engine, and its page rank algorithm formed the basic rules for early known search engine optimization. It was the first to rank indexed pages based on multiple factors and display these indexed pages based on their Google ranking. Google has an enormous number of servers located in countries worldwide, and having your website indexed by Google can help your website receive a lot of organic traffic. That said, many SEO techniques target putting websites at the top of Google rankings so they will appear at the top-most search position in the search results page, which is known as *Search Engine Results Page (SERP)*.

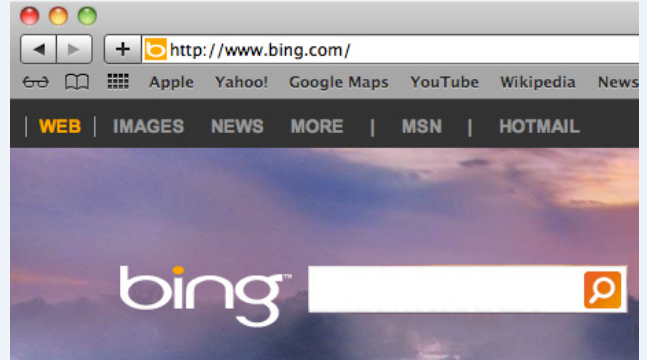## Review the Yahoo Search Engine

Yahoo (www.yahoo.com) has its own web crawler (Yahoo Slurp) and it uses different indexing capabilities to index your website. While Google focuses more on the concept of the search term and how users use different combinations of keywords, Yahoo focuses on the search keywords itself. Also, it places a lot of attention on the page title and Metadata. Understanding how the Yahoo search algorithm works will help you optimize your website or blog for Yahoo search. Also, Yahoo has its own paid directory, http://dir.yahoo.com/, where you can submit your website for indexing. Yahoo is now powered by Bing.
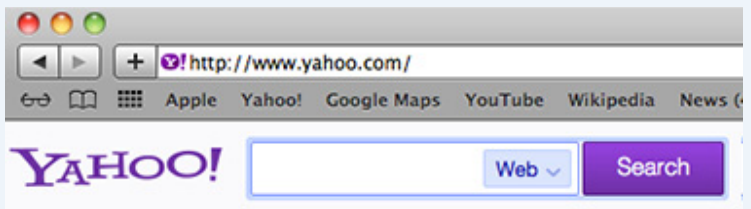
Review the Bing Search Engine

Bing (www.bing.com) is a popular Microsoft search engine. It is based on its predecessors, MSN and Live Search, which were old Microsoft search engines. The Bing algorithm places a greater focus on the web page title and description Metadata, similar to Yahoo. However, Bing has a better way to process queries and search terms than Yahoo. While major search engines take into account the authority of a link and the length of time a website has existed on the web, Bing is not restricted in this way. This is helpful to remember if you are building a new website, because Bing can index your website much more easily than Google, which puts the website domain name age as one of the important factors when indexing links and considering it trustworthy.

Review the AOL Search Engine

AOL (www.aol.com) is an old search engine. While AOL currently depends on Google to enhance the search results for those using AOL as their web searching tool, it depends on its own listing or external web links to display the search results. When you use AOL, you will notice that it provides both horizontal and vertical search as well as free search results and paid search results, which are promoted links that meet with your search criteria.

Review the Ask Search Engine

Ask (www.ask.com) is an old search engine with a different method of organizing a search. Ask groups the search results in a vertical search that can help the user narrow the search results. Ask is also a question and answer platform and allows users to ask questions and find answers from its own database. At this time, Ask is most focused on the Q&A search, which you will notice when you do a search on the Ask website. The results appear in the form of answers to your questions. While this may not affect your search engine optimization process, it can still drive traffic to your website if your content has been indexed by the Ask search engine.
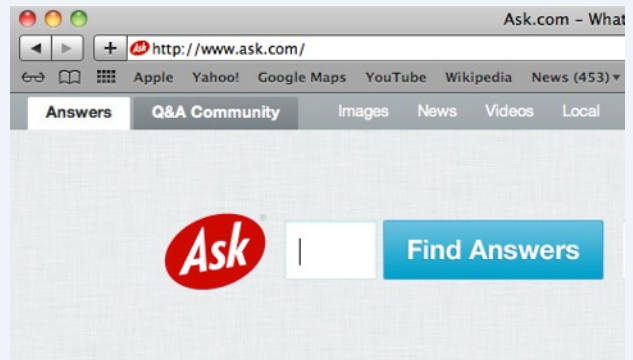
Set Up a Default Search Engine

Recent web browsers let you do web searches directly through their toolbars instead of visiting the search engine page first. This saves time and allows you to search the web using the browser search field in the toolbar or the website search field. Each web browser has a default search engine that opens and displays your search results. While most browsers use Google search, you can customize your web browser to do the search on other engines, such as Bing and Yahoo.
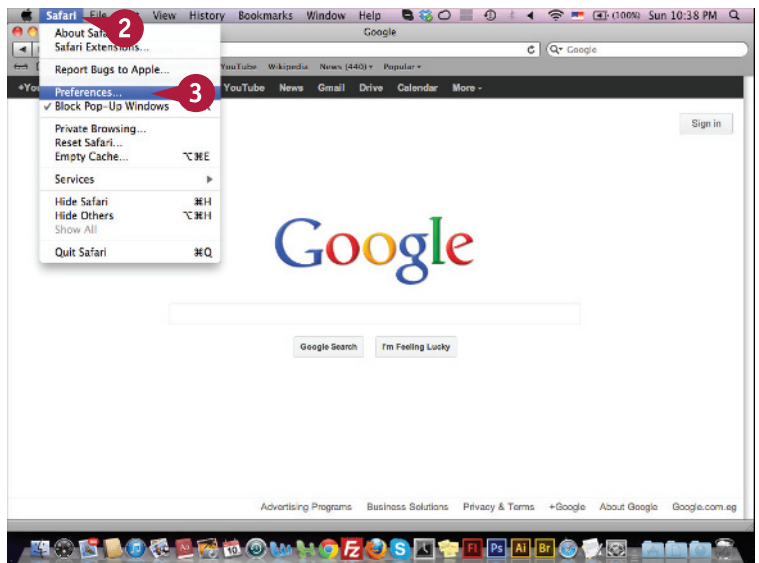
Set Up a Default Search Engine

1 Click **Safari** (⬤).
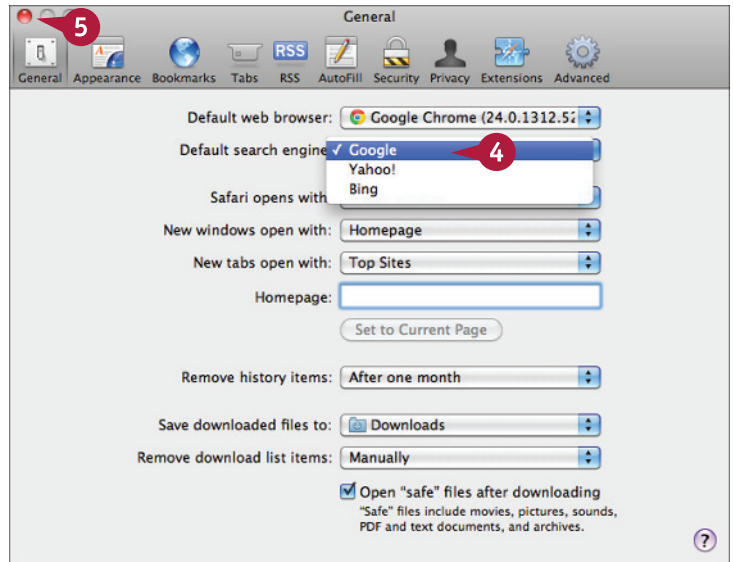

The Safari browser opens.
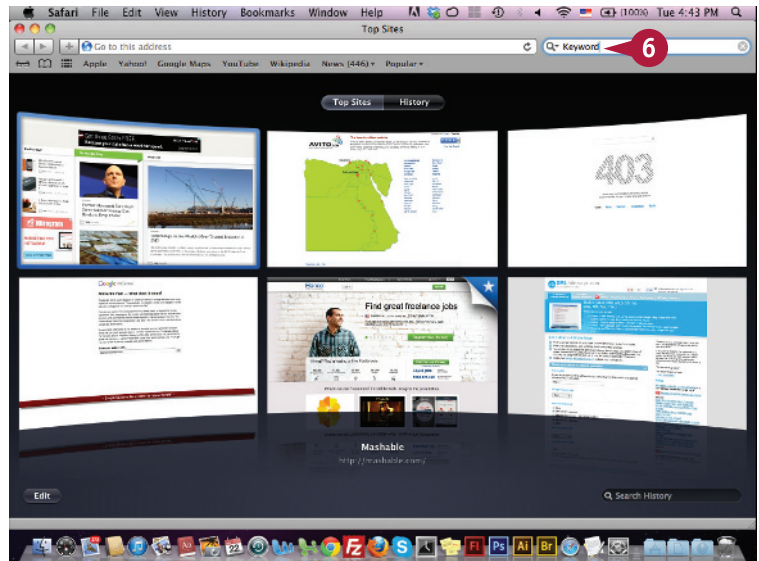
2 Click **Start.**

3 Click **Preferences**.

The General Preferences dialog box appears.

4 Click the **Default search engine** pop-up menu and select Google.

5 Click **Close** (🔴).

6 Type your search keywords in the search field.

7 Press Enter.

Can I change the default search engine in other browsers?
Yes, you can change the default search engine in browsers such as Internet Explorer, Firefox, and Chrome. For example, you can go to the Chrome browser's Settings and select your preferred search engine from the Search section.

Can I make changes in Windows browsers?
Yes, the only difference is the location from which you choose your new search engine, depending on the version of Windows you are using. In Windows 8, you can change the search engine from the Manage add-ons screen.