

Holistic SEO

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Learning objectives

After this lesson, you'll:

- know about a few influential search engines;
- be able to explain how search engines find your site and determine its ranking on the search results page;
- know about the most important Google updates and their implications;
- be able to define the terms 'SEO' and 'holistic SEO';
- understand which actions you should focus on to create a sustainable site that search engines will like;
- understand what short-term tricks you shouldn't use for SEO.

1. Different search engines

There's a world of search engines out there. The most popular search engine is **Google**, which has a reported global market share of 90%. But what else is there? Well, what about **Bing**? It's the second largest search engine in North America. About 6% of people in the US use Bing as their primary search engine. Also, 4% of US searchers use **Yahoo**. This means that, if you live in the US, it's worth researching what search engine your target audience uses.

But there's more. There are regions where other search engines are more dominant. In Russia, for example, **Yandex** leads the pack with 45% of the Russian market share. Also, the market leader in China is **Baidu**, which accounts for 65% of the market share over there. There are also privacy-oriented search engines, such as **Duckduckgo** and **Startpage**. They hold less than 1% of market share. Yet, they provide better personal data protection. So it's good to know that they exist.

Lastly, we'd like to mention Ecosia. This search engine uses its profits to [plant trees](#) and benefit the environment. Isn't that awesome?

Of course, stats change over time. Unsure about the current user numbers? Use [StatCounter](#) to check the latest state of search engines market share.

In our courses, we focus on **Google** because it's the largest, the most well-known, and it has the most users globally. At Yoast, when we think of Google, we think of its mission, which is:

"to organize the world's information and make it universally accessible and useful."

Google's mission gives us information about what they think is essential. But, how exactly do search engines work?

2. How do search engines work?

Search engines follow **links**. Links connect pages and documents, much like roads connect villages and cities. By following these links, search engines collect data to show to their users. But how do they do it?

A search engine like Google consists of:

1. crawlers
2. an index
3. an algorithm

We'll explore these terms in further detail below.

Crawlers, spiders, or bots

A **crawler** follows the links on the web. A crawler is also called a robot, bot, or spider. It goes around the internet 24/7. You can think of a crawler as a little, curious explorer. It collects content such as text, images, videos, news items, and anything that'll be interesting for a search engine to show.

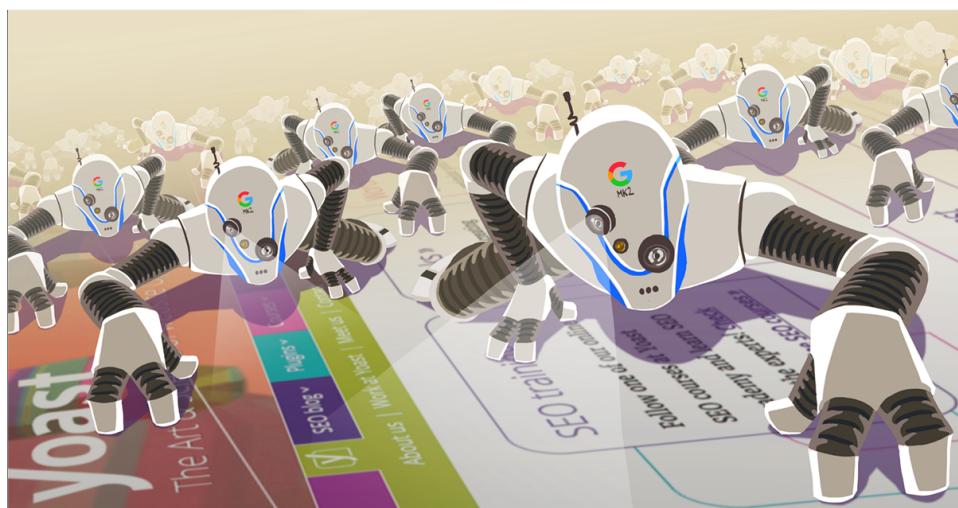


Image 1: Crawlers

Once it lands on a webpage, it saves the HTML version of that page in a gigantic database, called the **index**. This index is updated every time the crawler comes around your website and finds a new or revised version of it. Depending on how important Google deems your site and the number of changes you make on your website, the crawler comes around more or less often.

The search engine algorithm

After indexing your website, search engines can show it in the search results. But how do they decide what goes where? Well, search engines have an **algorithm** that does this for them. The algorithm takes the data from the index and calculates which site the user would most likely want to view based on their query.

Nobody knows exactly which factors decide how Google determines search results. Moreover, factors and their importance change very often. At Yoast, we test and experiment to get a good feel for the important ranking factors and the changes in these factors.

How do search engines find your site?

For a search engine to know that your website exists, there must be a link from another site – one the search engine already knows – to your site. Following that link will lead to the first crawler-session and the first save in the index. In the old days, you could submit your website to a search engine. That isn't possible anymore. Search engines nowadays follow all links on the web.

The value of links for search engines

It's crucial to have a basic understanding of how Google and most other search engines use **links**. Namely, they use the number of links pointing to a page to determine how important that page is. Internal links (from their own website) and external links (from other websites) can help a website rank high.

Some links are more important than others: links from websites that have a lot of links themselves are generally more important than links from small sites with few external links.

Crawlability

Depending on how you maintain your website, it can be easy or difficult for Google to crawl your website. If you have good **crawlability**, Google will be able to index your site without any problems. There are a few ways in which a crawler can be blocked from your website. If the website or a page on your website is blocked, you're telling Google's crawler: "do not come here; this

area is forbidden." You won't turn up in the search results in most of these cases.



Advanced: RankBrain

RankBrain is an advanced Google algorithm. It is a machine learning system that helps Google better decipher the meaning behind the terms people search for. It serves the best-matching search results related to those queries. When RankBrain was first announced, Google called it the third most important ranking factor. Presumably, RankBrain can somehow summarize what a page is about, evaluate the relevance of search results, and teach itself to get even better at it with time. The common understanding is that RankBrain, in part, relies on the traditional SEO factors (links, content, keywords, etc.), but also looks at other factors that are specific to the search term. It then identifies the most relevant pages in the index and arranges the respective results in SERPs (search engine result pages).



Advanced: Important Google updates

Throughout the years, Google introduced several significant updates. We'll discuss the most important ones of the last seven years and the implications of these updates.

Panda (2011)

In 2011, Google released its first **Panda update**. This Panda update tried to diminish those websites which were purely created to rank in the search engines. Panda mostly focused on **on-page factors**. In other words, it determined whether the site offered information about the search term visitors used. Two types of sites were hit especially hard by the Panda update:

1. Affiliate sites (sites that mainly exist to link to other pages).
2. Sites with very thin content.

Google has periodically re-run the Panda algorithm since its first release.

Penguin (2012)

A year later, Google rolled out the first **Penguin update**. Penguin particularly looked at the **links** websites got from other sites. It judged whether the sites linking to your website like and admire your products or content. If the links were artificial, Google no longer assigned link value. In the past, lots of people tried to boost their ranking by buying links. Penguin tried to diminish the effect of buying, exchanging, or otherwise artificially creating links. Websites with a lot of these artificial links got hit hard by this update. They lost their place in Google's ranking. This update has run several times since its inception and is now even said to be run continuously.



Image 2: Panda and Penguin updates

Hummingbird (2013)

In August 2013, Google released **Hummingbird**. In this update, Google laid down the groundwork for **voice search**. Hummingbird pays more attention to each word in a query, ensuring that the whole search phrase is taken into account, rather than just particular words. This should lead to results matching the entire query better. The results were not immediately clear, but over time, Google started showing more answer boxes in the search results (see Image 1), that gave the answer directly instead of enticing people to click on to a web page. Voice search has become more and more important as more devices (Siri, Google Home, Alexa) have started using voice search.

People also ask

How do you make tortilla chips?	▼
How do you make nachos in the oven?	▲
Sprinkle the tortilla chips into a large ovenproof dish. Scatter over the sliced jalapeno peppers and grated cheese. Transfer to the oven and cook until the cheese has melted, about 4-5 minutes. To serve, spoon dollops of the guacamole, salsa and soured cream on top of the nachos .	
BBC Food - Recipes - Nachos https://www.bbc.co.uk/food/recipes/nachos_92445	
Search for: How do you make nachos in the oven?	
How do you make nachos with mince?	▼
What is the best melting cheese for nachos?	▼

Image 3: Answer box in Google's search results

Mobilegeddon (2015)

In 2015, Google introduced the mobile update, dubbed '**Mobilegeddon**' by the industry. As more and more people use Google on mobile devices, Google used this update to boost sites that have **mobile-friendly pages** in its mobile search results. Around the same time, Google showed that mobile devices accounted for over 50% of all search queries.

Possum (2016)

In September 2016, the **Possum update** applied several recent changes to Google's **local ranking filter**. After Possum, Google has shown more varied results. The results depend on the physical location of the searcher - the closer you are to a business physically, the more likely it is that you'll see it among local results. And, the phrasing of the query also affects the result. Even very similar variations now produce different results.



Image 4: Possum update

Mobile-first index (2018)

In 2018, Google switched to its **mobile-first index**. This means Google will determine rankings based on the quality of the **mobile version of the site** instead of the desktop version. As more and more searches happen on mobile, Google wants its index and results to represent the majority of its users, who are mobile searchers. A new Googlebot will crawl your mobile site and determine if its performance, content, and user experience are up to scratch. If so, you get a better ranking. If it's lacking, other sites will rank higher, and you could lose out.

Medic, or Query Intent Update (2018)

In the same year, Google released a new update. Reporters called it **Medic** because it seemed to target medical websites at first. However, later it was discovered that the update affected organic results in various industries. It seemed that this update changed the algorithm to benefit sites that matched their top content with **how a user would ask their question**.

For example, we may have this query: "What is the best way to treat a burn?". In this case, Google's algorithm can attempt to deduce the intent of the query. The user wants to compare remedies for a burn to know the best one, so Google wants to provide the site that gives the absolute best quality answer to this question. It's a different search intent than if you were to search for "treat burn". In that case, Google suggests a how-to guide for burn treatment.

This change eventually resulted in people referring to the update as the **Query Intent Update**.

Continuous Updates (2018)

Since 2018, Google has begun updating continuously, resulting in multiple small adjustments each day. Also, Google continues to release bigger updates, also known as **core updates**, every few months. This means that it becomes increasingly hard to predict the ranking algorithm. So, we advise you to try and focus on making your site useful for people. If you align your goals with Google's mission, you have a better chance at ranking.

BERT (2019)

In 2019 Google released a natural language programming model called BERT. BERT stands for Bidirectional Encoder Representations from Transformers. Those are a lot of difficult words to say that Google is now better at reading and understanding texts. Before, Google could only interpret a text in one direction. Whereas now, it can associate words in both directions simultaneously. This makes it much easier for Google to draw accurate context from texts. In turn, this results in better search results. By using BERT, Google can link the appropriate context of different sites to the right search query. In 2021 Google introduced MUM — Multitask United Model. According to Google, this new language model is 1000x more powerful than BERT. MUM is coming to Google products sometime in the future.

3. What is SEO?

So, why is it important to know how a search engine works? Well, more than **a third** of people who use a search engine click on the first result.

Furthermore, **60%** of the SERP clicks go to the top three results, which means it makes a world of difference to belong to this category.

To become the best result and increase our chances of being found by our audiences, we need to practice SEO. Good SEO practices will result in visitors that stick around, social media attention, and more sales or ad revenue.

We'll elaborate on this at a later point in this document. But first, how do we define SEO?

Search Engine Optimization (SEO) is the profession that attempts to optimize sites to make them appear in a high position in the organic search results. Organic search results mean that these results aren't sponsored. A search engine algorithm determines the rankings of organic search results.

Although Google's algorithm remains secret, a decade of experience in SEO has resulted in a pretty good idea about the important ranking factors. In our view, the ranking factors in Google's algorithm can be divided into two categories:

1. There are **on-page factors** that decide the ranking of your website. These factors include technical issues (e.g., the quality of your code) and content issues (e.g., the structure of your site and texts, or readability).
2. There are **off-page factors**. These factors include links from other websites, social media attention, and other marketing activities outside your own website.

4. What is holistic SEO?

At Yoast, we practice what we call '**holistic SEO**'. Holistic means that you look at the bigger picture, and not just the smaller parts on their own. For example, when you're growing plants, you could just water them and put them in the sun. But it's better if you think about the quality of the soil, and how you could prevent them from catching plant flu, too.

Your primary goal should be to build and maintain the best possible website. Ranking in Google will come automatically if your website is of extremely high quality.

Remember Google's mission from the previous lesson? Right, its mission is to **index all the world's information and make it universally accessible**. In addition to this, Google, of course, wants to make money. To achieve this, it has to make sure people keep using Google. This means that it has to show people the results they are looking for. So, if your website is the best in your market, Google wants to rank it high in the results.

Permanently ranking well in Google demands an **extensive SEO strategy** focused on every aspect of your website and its marketing. The technical side, the user experience (UX), the content on your website: all need to be top-notch. To keep ranking well in Google, you should develop – what we call – a holistic SEO approach.

Just make an awesome website!

Yoast has been giving SEO advice for many years now, but it has always remained the same: you have to make sure your site is really, really awesome! Don't use any 'tricks'. While some of these tricks might get you ranked quickly, they usually don't work in the long run, and they might even backfire.

How do you develop a holistic SEO strategy?

What's important to remember is that you should mainly **focus on your users** and their experience of your site. Sure, you want your site to match what Google's algorithm is looking for because Google's mission is to find the best result. However, focusing on making a great site for your user will lead to a better ranking, because you're offering what they want in the first place. So how can you achieve that?



Image 5: Holistic SEO is mainly about focusing on your users

A holistic approach to SEO means you focus on all the following aspects:

Proper keyword research

Keyword research means that you find the words your audience uses when they look for products or information you offer. When you know which words your audience uses, you can integrate them into your copywriting. This way, your audience will literally find what they're searching for.

Good technical SEO

A user likes a fast site, and so does Google. By practicing good technical SEO, you make it quicker to load for users and more crawlable by Google. A proper site structure will make your site easier to use, too.

A great user experience

By increasing your site speed, you increase user experience, but there's more to it. Your audience won't like a site that's difficult to navigate, or that has confusing content. Try and browse your site from the perspective of a user. Does it feel the way you want it to feel?

Writing quality content

By quality content, we mean content that is easy to read, to-the-point, and, most importantly, useful. Your audience wants helpful content that provides answers to their questions.

A solid social media strategy

Social media platforms can help you reach people. And the best thing about it is that it will help you rank, too. Invest in a [social media strategy](#) to create buzz for your website and garner attention.

Mobile optimization

Many, many people browse the web on a mobile phone nowadays. Make sure to research how your website translates to a mobile browser and what you need to do to [optimize the mobile user experience](#).

Security

Providing a secure environment for you and your users is important for your trustworthiness. Examples of this are using complicated passwords for your accounts and using [HTTPS](#).

Accessibility

Last but not least, you have to make sure your website is accessible to everyone. As a simple example, consider how a blind person would navigate your site. Is it very difficult? Then read up on accessibility so everyone can enjoy your website.

Why would you apply a holistic SEO approach?

Having an awesome website with high-quality content and great user experience will not instantly improve your ranking. In the long run, though, it will definitely affect your SEO positively!

Attractive websites have a lower bounce rate, which is the rate at which people leave the website. People are less likely to stick around when they feel like the website isn't giving them what they're looking for. If the page looks secure and safe, it shows information clearly, and it's quick to navigate, there's a higher chance people will stick around and browse.

In addition, attractive websites have a much higher chance of receiving **social media attention**. When people share your site, Google will notice the social media attention it's receiving. This is good for your SEO.

Awesome websites will also result in **higher conversion rates**. Conversion happens every time a visitor completes a desired action on your website, like buying a product. If your audience likes and understands your website, the

chance of them buying your products or returning to your website is much higher.

Now we know different aspects of a holistic SEO strategy. But how do you put that into practice? The upcoming example tells the story of Linda, who applies her skills and network in order to start optimizing her website.

Example: What might an SEO beginner do?

Linda is an ambitious potter who wants to expand her business and start a blog about her work. This way, she hopes to establish some internet presence and inspire people to buy her ornate vases and join her network. She puts in hours of work, designing a beautiful site. She does it all by herself, and she feels very proud. Yet, she discovers that the site doesn't get as much traffic as she would like. Linda wants to improve her site ranking on Google so more people will find it, but she's not sure how.

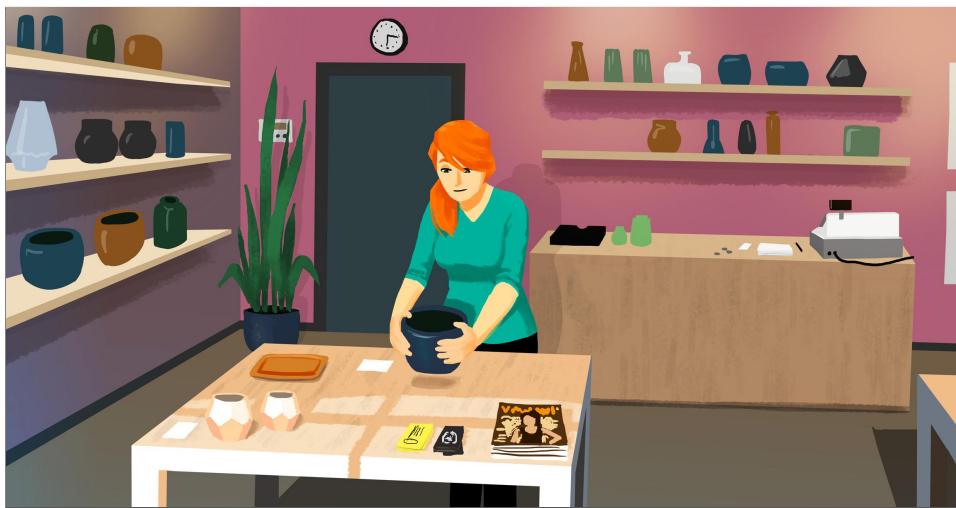


Image 6: Linda is an ambitious potter

Linda talks to a few friends who work in marketing, and she gathers several options to climb the search platform ranks.

1. She could write quality blogs and improve her site's internal linking.
2. She could try to join or build a community that will provide her site with useful links.
3. She could improve her site speed.

She decides to start writing and publishing a blog about how traditional Dutch pottery inspires her because her shop customers have been asking her questions about it. She also writes a detailed how-to on building your own mini oven for baking pottery in your backyard. She was about to build one for her friend anyway! Linda puts relevant links to her own site in her blog.

For her next move, Linda decides to scour internet forums for like-minded pottery bloggers, and she makes some new friends. By creating a community, they can help each other out.

Lastly, she texts her tech-savvy aunt for some help. In exchange for a pottery lesson, her aunt shows Linda how she can optimize her website's speed. The load time of her page decreased noticeably just by downsizing some of the pictures she was using! Happy with the changes, Linda coaches her aunt in shaping her first bowl on the pottery wheel.

At first, her ranking doesn't seem to change much. But, Linda continues working on her website. She diligently and holistically maintains her posts and pages. Sometimes it's hard to combine with her crafting, but she has a well-organized calendar to help her out. After some time, the search engine seems to pick up on her expertise and bumps up her ranking. Sweet success!

5. Don't use any tricks

Applying a holistic SEO approach means staying away from short-term tactics. Tactics like these focus on exploiting loopholes in Google's algorithms, and they try to get websites to rank higher than they deserve. A few examples of these tricks are:

- **Keyword stuffing**

Some sites try to change their ranking by filling pages with (unrelated) keywords or numbers. These keywords often appear out of context, for example, in a list or group. Sometimes they even use white text to hide the fact that they are stuffing keywords.

- **Link building**

There's white-hat link building, where you build an engaged community and promote your website to relevant people, but there are black-hat strategies of link building as well. Some sites try to rank higher by buying links. This includes paying for links, but also sending someone a free product in exchange for a link.

- **Page swapping**

Page swapping is a trick for getting ranked for one page, and then, after the page has attained a good position in the search results, replacing that page for another.

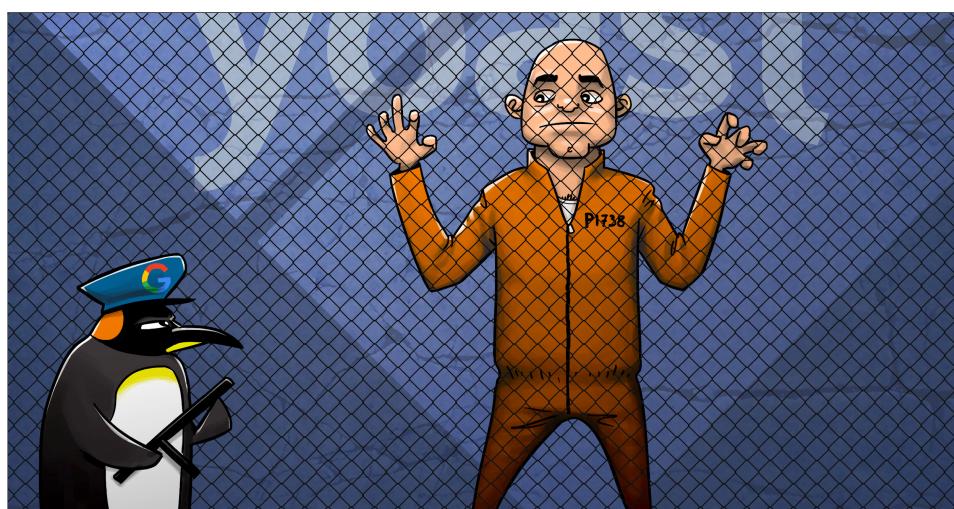


Image 7: Don't use short-term tactics or you'll get penalized

Google has updated its algorithms to account for these tricks, such as the Penguin update. With the updates, fishy websites that used bad SEO tricks were heavily **penalized**. Using similar tactics can get you banned from Google for a significant period of time. So, we want you to create a **sustainable SEO strategy**, which will not only have you rank today but also in the long run. The better Google's algorithm becomes, the less effective these tactics will be.



Key takeaways

- Search engines use crawlers to **find your site** by following links. If they find your site, they save it in the index. After indexing your website, search engines can show your website in the search results. A secret algorithm decides the position in the search results.
- **SEO** is the practice of optimizing websites to make them reach a high position in a search engine's search results.
- At Yoast, we believe that **holistic SEO** is the best way to become the best result because you focus on making every aspect of your site great.
- We advise you not to do any **short-term tricks** because, in the long run, it will have negative consequences for your ranking. Instead, we recommend you to practice **sustainable SEO**, where you keep the user in mind.
