

Optimizing images for SEO

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Learning objectives

In this lesson you will learn:

- how to use the right images in your posts;
 - the purpose of alt text;
 - the use of structured data in images;
 - how to use images for social sharing;
 - how to use images in XML sitemaps.
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Whether you're a blogger or you write articles for an online magazine or newspaper, chances are you'll find yourself asking whether your article needs an image or not. The answer is always "Yes". **Images bring an article to life** and can also contribute to your website's SEO. In this lesson, we explain how to fully optimize an image for [SEO](#) and provide some pointers on using images for the best user experience.

1. Using images

Images help readers better understand your article. The old saying “A picture is worth a thousand words” probably doesn’t apply to Google. But it’s certainly true when you need to spice up 1,000 dull words, illustrate what you mean in a chart or data flow diagram, or just make your social media posts more enticing. It’s a simple recommendation: you should add images to every article you write online to make them more appealing.

Find the right image

If you have the opportunity to add your own image, please do so. Your team page needs pictures of your team, not people on a stock photo. Your article needs an image that has the same subject as your article. If you would use an image, just to use an image and get a green bullet in our SEO plugin, you are doing it wrong. The **image should reflect the topic of the post**, or have illustrative purposes within the article.



Image 1: Finding images

If there is no way to use images of your own, there are other ways to find more unique images and refrain from using stock photos. [Unsplash](#) is a nice image source for instance. Some obvious alternatives for photos could be illustrations, like we use at Yoast. An honorable mention should go to animated GIFs, as these seem to become more and more popular these

days. Don't go overboard. Too many GIFs can make your post less attractive to read, as your reading will be interrupted by the movement in the image.

2. Preparing images for use in your article

Once you have found the right image – whether an illustration, chart or photo – the next step is to **optimize it** for use on your website. There are a number of things you need to think about:

Choose the right file name

Image SEO starts with the **file name**. You want Google to know what the image is about without even looking at it, so use your focus keyword in the image file name. It's simple: if your image shows a sunrise in Paris over Notre Dame Cathedral, the file name shouldn't be DSC4536.jpg, but `notre-dame-paris-sunrise.jpg`. The main keyword would be Notre Dame, as that is the main subject of the photo, which is why it's at the beginning of the file name.

Choose the right format

For images, the right format doesn't exist; it depends on the kind of image and how you want to use it. In short, we recommend to:

- choose JPEG for larger photos or illustrations: it will give you good results in terms of colors and clarity with a relatively small file size;
- use PNG if you want to preserve background transparency;
- or, use WebP instead of JPEG and PNG. It will produce high-quality results with smaller file sizes. You can use tools like [Squoosh](#) to convert your image into WebP.
- use SVG for logos and icons. With the help of CSS or JavaScript you can manage images in SVG format, for instance, resize them without loss of quality.

If you know a large part of your audience uses specific browsers or devices, you can check whether your preferred format is supported by those browsers on [CanIuse.com](#). When you've got the right name and format, it's time to **resize and optimize** your image!

Scale for image SEO

Loading times are important for UX and SEO. The faster the site, the easier it is to visit and index a page. Images can have a big impact on loading times, especially when you upload a huge image then display it really small – for example a 2500×1500 pixels image displayed at 250×150 pixels size – as the entire image still has to be loaded. So resize the image to how you want it displayed. WordPress helps by automatically providing the image in multiple sizes after upload. Unfortunately, that doesn't mean the file size is optimized as well, that's just the image display size.

Use responsive images

This one is essential for SEO as well, and if you're using WordPress it's done for you since it was added by default from version 4.4. Images should have the `srcset` attribute, which makes it possible to serve a different image per screen width — especially useful for mobile devices.

Reduce file size

The next step in image SEO should be to make sure that **scaled image is compressed** so it is served in the smallest file size possible.

Of course, you could just export the image and experiment with quality percentages, but I prefer to use 100% quality images, especially given the popularity of retina and similar screens.

You can still reduce the file size of these images by removing the [EXIF data](#), for example. We recommend using tools like [ImageOptim](#) or websites like [JPGmini](#), [jpeg.io](#) or [Kraken.io](#).

When you've optimized your images, test your site with tools like [Google PageSpeed Insights](#), [Lighthouse](#), [WebPageTest.org](#) or [Pingdom](#).

Adding the image to your article

While Google is getting better at recognizing what's in an image, you shouldn't rely on their abilities just yet. It all comes down to you providing the context for that image — so fill in as much as you can!

Now your image is ready to use, but don't just throw it into your article anywhere. As mentioned earlier, adding it close to related textual content helps a lot. It makes sure the text is as relevant to the image as the image is to the text.

Captions

The **image caption** is the text that accompanies the image on the page. Why are captions important for image SEO? Because people use them when scanning an article. People tend to scan headings, images and captions as they scan a web page.

Do you need to add captions to every image? No, because sometimes images serve other purposes. Decide whether you want to use yours for SEO as well or not. Bearing in mind the need to avoid over-optimization, I'd say you should only add captions where it would make sense to the visitor for one to be there. Think about the visitor first, and don't add a caption just for image SEO.

3. alt text and title text

The **alt** text (or alt tag) is added to an image so there will be descriptive text in place if the image can't be displayed to the visitor for any reason. The alt text describes what's on the image and the function of the image on the page. So if you have an image that's used as a button to buy product X, the alt text would say: "button to buy product X".



Image 2: Improving accessibility

The alt tag is used by screen readers, the browsers used by blind and visually impaired people, to tell them what is on the image. The title attribute is shown as a tooltip when you hover over the element, so in case of an image button, the button could contain an extra call-to-action, like “Buy product X now for \$19!”.

Each image should have an alt text. Not just for SEO purposes but also because blind and visually impaired people otherwise won't know what the image is for. If you have images in your design that are purely there for design reasons, you're doing it wrong, as those images should be in your CSS and not in your HTML. If you really can't change it, give it an empty alt attribute, like so:

```

```

The empty alt attribute makes sure that screen readers skip over the image.

Also, make sure the alt text includes the SEO keyphrase for that page (if appropriate). Most importantly, describe what's in the image so both search engines and people can make sense of it. The more relevant information surrounding an image has, the more search engines deem this image important.

4. Add image structured data

Adding [structured data](#) to your pages can help search engines display your images as **rich results**. While Google says structured data doesn't help you rank better, it does help to achieve a more fleshed out listing in Image Search. There's more, though. For instance, if you have recipes on your site and you add structured data to your images Google can also [add a badge to your images](#) showing that this image belongs to a recipe. Google Images supports structured data for the following types:

- Product
- Video
- Recipe

Google has a number of guidelines you need to follow if you want your images to appear rich in image search. The main takeaway is that the image attribute is mandatory and that your images should be crawlable and indexable. You can find them all Google's [Structured Data General Guidelines](#).

5. OpenGraph and Twitter Cards

If you add the following image tag to the `<head>` section in your page HTML like this:

```
<meta property="og:image"
content="http://example.com/link-to-image.jpg" />
```

That will make sure the image is included in your share on Facebook (and OpenGraph is also used for [Pinterest](#), for instance).

Our [Yoast SEO plugin](#) has a [Social section](#) where you can set and even – in the Premium version – [preview your Facebook and Twitter posts](#). Make sure you use a **high-quality image**, like the original image you used in the post, as the social platforms use higher quality/larger images more often than not. If you have set this up correctly, and it doesn't work, try to flush Facebook's cache in the [URL Debugger](#). [Twitter Cards](#) do the same for Twitter and are also generated by our plugin.

6. XML image sitemaps

If you are a web developer, you might wonder about XML image sitemaps. You can use Google image extensions for sitemaps to give Google more information about the images available on your pages. Image sitemap information helps Google discover images that we might not otherwise find (such as images your site reaches with JavaScript code), and allows you to indicate images on your site that you want Google to crawl and index.

Yoast SEO does not generate image XML sitemaps, but following Google's advice it includes them in the page or post sitemaps. Just scroll down in our [post sitemap](#) and you'll see we have added images to all our latest posts

(there is a column just for that). Adding images to your XML sitemaps helps Google index your images, so be sure to do so for better image SEO.

Image SEO is the sum of a number of elements. With Google getting better at recognizing elements in images every day, it makes sense to make sure the image and all its elements contribute to a good user experience as well as SEO.

Key takeaways

- Use **relevant images** that match your text;
 - Pick **good file names** for your images;
 - Make sure **image dimensions** match the image size as displayed and **reduce file size** for faster loading;
 - Add a **caption**, if appropriate, for easier scanning of the page;
 - Use image **alt text**;
 - Add **structured data** to your images;
 - Add **OpenGraph and Twitter Card** tags for the image;
 - Don't break the left reading line with an image – align images right or center
 - Use images in your **XML sitemaps**
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