# Technical SEO quick start guide

Technical SEO helps search engine crawlers understand and index your website's content more easily.

The goal is to optimize for Google's Core Web Vitals, the factors Google considers most important in a website's user experience:

- Loading: How fast it takes for your page to load
- **Interactivity:** How long it takes for users to interact with your content, like clicking on your navigation menu
- Visual stability: Whether elements on your page move around as it loads (ideally, they don't)

Technical SEO isn't just for satisfying search engines. The idea behind the Core Web Vitals is that users enjoy and benefit most from websites that are fast, clear, and easy to use.

Here are the main technical considerations to be mindful of. We've organized them into three sections:

- 1. Access: factors that help Google access the URLs on your website.
- Understand: factors that help Google understand what your content is about.
- 3. **Serve:** factors that influence the user's page experience.

### 1. Access

#### Robots.txt file

Robots.txt is a text file that instructs search crawlers on how to crawl your site. It's used to disallow web pages, which tells Googlebot to focus elsewhere.

Most websites don't need a robots.txt file, especially new companies just starting out. It makes the most sense for sites with more than 10,000 unique pages that change frequently—at least once a week or more often.

For these larger, frequently changing sites, a robots.txt file helps Googlebot prioritize which content to crawl. You'd disallow less important content that users

don't need to see in SERPs, like your staging site, filtered product category pages, and internal search results pages.

You can create a robots.txt file by using a free robots.txt generator like this one from SEO Book. Once complete, upload the robots.txt file to your site's root domain.

#### Links

Links are a central part of SEO. From an on-page perspective, you should include both internal and external links within your content.

- Internal links: These links direct users to another page on your site.
- External links: Also known as outbound links, these links direct users off of your site.

Internal links help define your site's hierarchy and architecture by telling Google which web pages are most important on your site. For example, a link to your homepage in your navigation menu and footer on every page shows that it's more important than your blog posts.

From a usability perspective, internal links also help keep users on your site for longer. Ideally, visitors would explore and browse through your content rather than navigate elsewhere.

To get internal link suggestions, use Ahrefs Site Audit's Link opportunities feature. It shows relevant anchor text on your site that could be linked to another page—encouraging users to continue browsing your site.

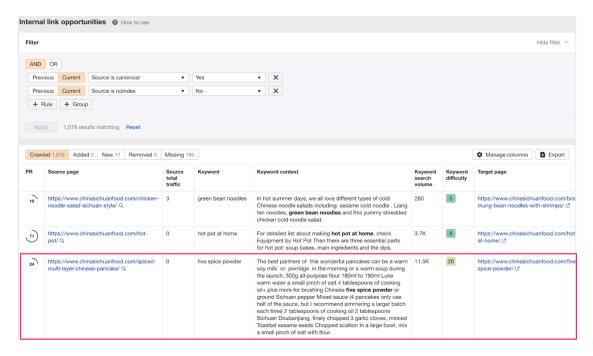


Image credit: Ahrefs

Your website shouldn't only have internal links, though. Link externally to helpful references and trustworthy resources related to your content. These enhance your site's authority and also help Google understand what your content is about.

#### Site architecture

Site architecture is one of the foundational pieces of practicing good SEO. It describes how a website is structured, which affects how both users and Googlebot explore it. A clear structure makes it easy to browse your site more efficiently.

Websites with poor site architecture are disorganized. Visitors get lost in them; it's not easy to find what they're looking for. There may even be "orphan" pages, pages that can be found in SERPs but not through any link on the website.

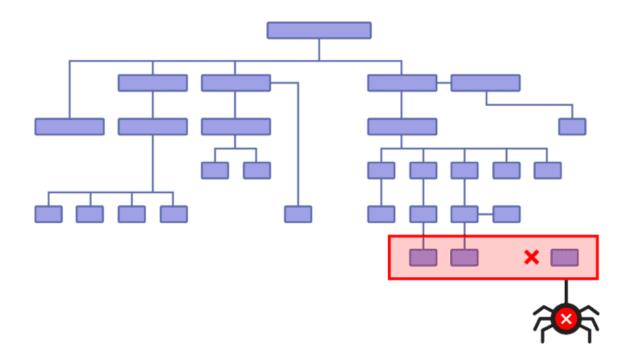


Image credit: Backlinko

The ideal site architecture uses a hierarchical structure that's intuitive and easy to navigate. Pages are grouped together as subcategories of broader categories, with each page just a few clicks from one another. They generally follow this format:

https://www.example.com/category/subcategory/

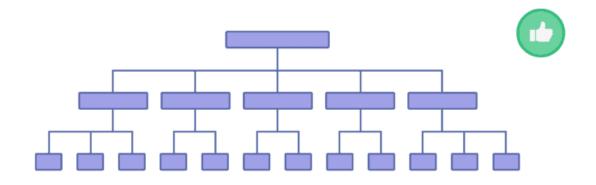


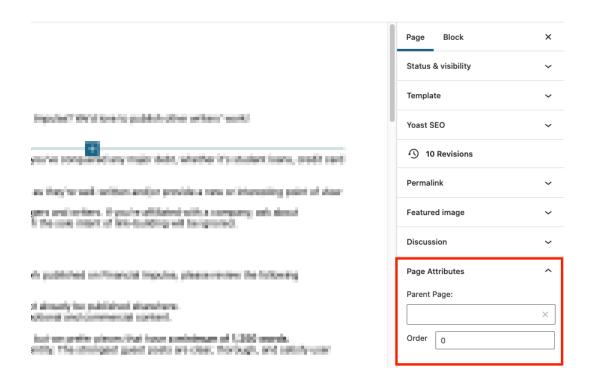
Image credit: Backlinko

Consider how Salesforce organizes its pages under higher-level categories like its products, resources, and blog:

- https://www.salesforce.com/
  - https://www.salesforce.com/products/
    - https://www.salesforce.com/products/what-is-salesforce/
    - https://www.salesforce.com/products/marketing-cloud/overvie w/
    - https://www.salesforce.com/products/service-cloud/overview/
  - https://www.salesforce.com/resources/
    - https://www.salesforce.com/resources/guides/
    - https://www.salesforce.com/resources/guides/customer-transf ormation-playbook-changing-company-mindsets/
  - https://www.salesforce.com/blog/
    - https://www.salesforce.com/blog/economic-inequality/
    - https://www.salesforce.com/blog/sustainable-business-model s/
    - https://www.salesforce.com/blog/relationship-building-distribu ted-teams/

You should do the same for your site—create logical categories and subcategories to organize how your pages are laid out. The exact process for creating this structure depends on your content management system (CMS), whatever platform you're using to create and manage your web content, like WordPress, Webflow, Squarespace, and so on.

In WordPress, for example, Page Attributes in your web page's settings sidebar allows you to categorize a page by nesting it under a "parent."

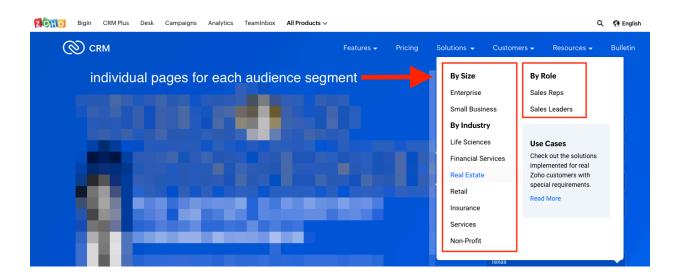


### How many landing pages should your website have?

The exact number of landing pages your website should have is specific to your company and what you sell. Instead of focusing on this number, focus on optimizing your website for customers—how they might approach and navigate it for more information before deciding whether or not to buy something. Here are a few guiding principles.

- For starters, every website benefits from having these foundational pages:
  - Homepage
  - About
  - Contact
  - Products/services (a high-level product overview/category page as well as individual product pages if you have multiple products)
  - Privacy policy
  - o Terms of service
- Some other pages worth creating:
  - Testimonials/reviews
  - Case studies
  - FAQ
  - Return/refunds

- Shipping
- Create a landing page for each of your offerings. Your offerings don't only include your product; they could be your newsletter, a product demo, or special discount. Each of these deserves a dedicated landing page with more information.
- After you've set up your website's foundational pages, create more detailed pages, like about each of your product's core features or served industries. This is a commonly missed SEO opportunity because many users search for a very specific feature or offering that a high-level product features page can't rank well for. More detailed landing pages expand your company's online presence.
  - For example, Zoho has separate pages about how its CRM can be used by companies of different sizes and in different industries, plus employees in different roles.



### 2. Understand

### Title tag

A title tag is the HTML snippet that specifies a web page's title on SERPs.

### Real Estate Accounting Software | Xero US

Need simple accounting software for your real estate business? Xero makes it simple to keep track of assets and maintain your records.

Including your target keyword in the title tag helps both search engines and humans understand what your page is about. But all of your competitors will do the same, so you need to find ways to make your title more interesting and get users to click. Consider adding some emotion—but don't go overboard and write clickbait.

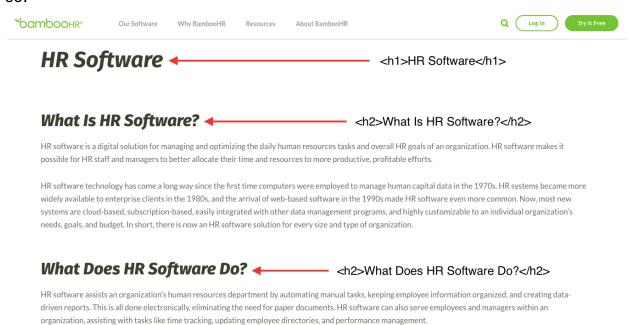
#### Some examples:

- How to Learn SEO (and Stay Sane)
- 18 Tips & Tricks to Master the Art of HR Management
- 8 Best Speed Reading Courses to 4x Your WPM

Ideally, title tags should be under 60 characters, so they aren't cut off. Use Moz's Title Tag Preview tool to see how yours will appear.

### **Subheadings**

Subheadings are the section headers that break up your content, formatted like so:



They're arranged in a hierarchy, with a single h1 as the title of your content, then h2s at the top, followed by h3s, h4s, and so on. (Not to be confused with the title tag, the h1 tag doesn't appear in SERPs.)

Don't stuff your keywords into every subheading. Instead, think of your content and target keywords from a reader's perspective and in terms of your content's usability. Where does it make sense to include your target keywords naturally? What related keywords help support what your content is about?

For example, HubSpot's high-ranking post about customer experience uses this structure:

- How to Improve Customer Experience (h1)
  - What impacts the customer experience? (h2)
  - How to Improve Customer Experience in 8 Steps (h2)
    - 1. Illustrate the customer journey (h3)
    - 2. Equip and uplift your employees (h3)
    - 3. Audit the customer experience from multiple internal perspectives. (h3)
      - Marketing (h4)
      - Sales (h4)
      - Customer Service (h4)
    - 4. Dedicate a clear focus on this initiative.
    - And so on...

### Schema markup (structured data)

Schema markups (also known as structured data) are snippets of code that, when added to your web pages, give Google more information about how to represent your content in SERPs. You've no doubt seen them before.

https://www.amazon.com > Eat-Pray-Love-Everything-...

### Eat, Pray, Love: One Woman's Search for Everything Across ...

Elizabeth Gilbert's **Eat Pray Love** touched the world and changed countless lives, inspiring and empowering millions of readers to search for their own best ...

**Publisher:** Riverhead Books (January 30, 2007) **Item Weight:** 12 ounces **Dimensions:** 5.47 x 1 x 8.46 inches

https://www.rottentomatoes.com > eat\_pray\_love

#### Eat Pray Love - Rotten Tomatoes

Newly divorced and at a crossroads, Gilbert steps out of her comfort zone, risking everything to change her life, embarking on a journey around the world that ...

Genre: Drama, Romance

Release Date (Theaters): Aug 13, 2010 wide

Box Office (Gross USA): \$80.6M

★★★★ Rating: 36% · 207 votes

https://en.wikipedia.org > wiki > Eat\_Pray\_Love

#### Eat Pray Love - Wikipedia

**Eat Pray Love** is a 2010 American biographical romantic drama film starring Julia Roberts as Elizabeth Gilbert, based on Gilbert's 2006 memoir of the same ...

Production companies: Columbia Pictures; Pla... Produced by: Dede Gardner

Budget: \$60 million Screenplay by: Ryan Murphy; Jennifer Salt

Elizabeth Gilbert · Christine Hakim · Luca Argentero

Several types exist, and you can find more details about each on schema.org.

There's no evidence that schema directly affects SEO—but it does improve user experience. How so? It gives visitors more insight into your content, which can then encourage them to actually click on your site. For example, a user looking for a specific item might be motivated to click on a result after seeing product schema that indicates it's currently in stock.

https://www.hydroflask.com > 32-oz-wide-mouth

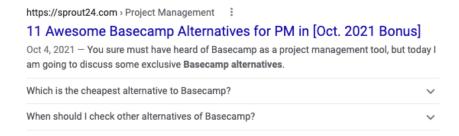
### 32 oz. Vacuum Insulated Stainless Steel Water Bottle - Hydro ...

Big enough for a whole day on the river or trails, our **32 oz** Wide Mouth Bottle is made with professional-grade stainless steel and a wider opening for ...

\*\*\* ★ Rating: 4.6 · 1,846 reviews · \$9.95 to \$44.95 · In stock

Not as many websites as you might expect actually use schema, so adding it can make your content leave a stronger impression on users and improve clickthrough. We especially recommend adding the following schema:

• **FAQ:** Add this markup to not only your actual FAQ page but also your product and service pages. By addressing user objections and concerns, this schema gives more readers info than your meta description on its own.



- **Product/offer:** This schema shows price and availability. If your competitors don't use it, it's a quick way for your page to stand out. If they do use it, it helps users quickly compare products from different search results.
- Ratings and reviews: This schema functions as social proof. A search result with obviously good ratings and reviews is a lot more enticing than one without any of this information.
- **Video:** Since this schema enables a video thumbnail in SERPs, your content gets a visual element that text-only search results lack.

https://www.elizabethgilbert.com > video

#### Video | Official Website for Best Selling Author Elizabeth Gilbert



TEDTalks: "Eat, Pray, Love" Author **Elizabeth Gilbert** muses on the impossible things we expect from artists and ...
Sep 22, 2015 · Uploaded by TED

To set up schema markup, use Google's Structured Data Markup Helper or another free online generator like TechnicalSEO.com's. These tools walk you through the markup process and then provide a code to be added to a specific page's HTML code.

#### 3. Serve

**Hosted Domains** 

#### **HTTPS**

Take a look at how these two URLs appear in your browser:



The difference is HTTPS, an internet communication protocol that protects the data shared between a user and a website. The alternative, an HTTP connection, is less secure.

Google announced HTTPS as a ranking signal in 2014. Apart from its SEO benefits, using HTTPS also enhances the user experience by making visitors more comfortable on your site. You can set it up for your site with an SSL certificate, which is often offered by your web host.

For example, with DreamHost, you can see which sites aren't secure under the Manage Domains option.

#### DOMAIN REGISTRATION WEB HOSTING SECURITY EMAIL ACTIONS Shared Hosting with PHP 7.4 HTTPS Secure 2 mons+ left. (User: DNS | Visit | WebFTP | UniqueIP Add Malware Remover Edit | Upgrade to DreamPress | Remove Shared Hosting with PHP 7.4 Journal Charles (SIR) HTTPS Secure 1 Address Delete (User: DNS | Visit | WebFTP | UniquelP Add Malware Remover Edit | Upgrade to DreamPress | Remove Shared Hosting with PHP 7.4 and the report of the con-HTTPS Not Secure C Restore ⊗ Delete (User: 1 Address DNS | Visit | WebFTP | UniqueIP Add Malware Remover

Click on the site you want to secure; then follow the prompts to activate it.

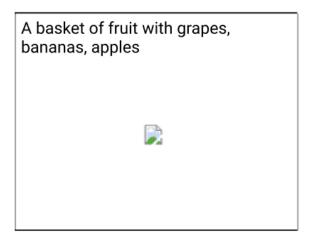
Edit I Upgrade to DreamPress I Remove

If your web host doesn't offer SSL certificates, get one from a Certificate Authority like GoDaddy or Namecheap. You'll need to install it yourself, but whatever authority you get it from will provide instructions about this process.

#### **Images**

Images (and other forms of media like video) make a website more engaging than if it were purely text, but you need to optimize these assets for a better page experience. Here's how.

- **Resize your images**. Large images slow down your site. If you don't plan on displaying full-sized images at 4000 x 3000 pixels, make them smaller.
- Compress image file size. Not to be confused with image size, image file size refers to the amount of space needed to store an image. This can affect your site speed. To maintain a fast loading speed, compress your images using Photoshop's "Save for the web" option or TinyPNG.
  - When should you use JPEGS over PNGs and vice versa? JPEGs
    usually offer better compression levels than other file formats, so
    they're best for images with opaque backgrounds, like photographs.
    PNG allows for transparency and higher image quality but generally
    come with a larger file size; they're ideal for logos, graphs, and
    illustrations.
- Give your images descriptive file names. A descriptive file name helps search crawlers understand its subject matter better than something like "IMG\_97950" or another default name. Use hyphens to separate words, like automatic-timer-feature.png.
- Write descriptive alt text. Alt text (short for "alternative text") is the snippet
  of information included in an image's HTML code. When an image fails to
  load, the alt tag is what appears. Screen readers also read alt text to let
  users with visual impairments know what's in it. It gives context to images'
  subject matter and like file names, helps search engine crawlers index
  images correctly.

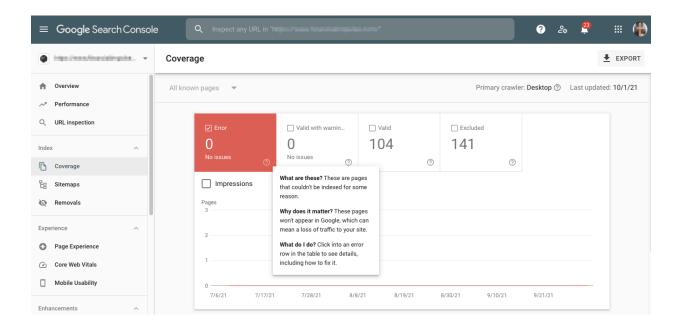


- Image credit: SE Ranking
- Choose original images over stock photos. Research shows that sites with original images tend to outrank sites that rely on stock photos. So whenever possible, opt for creating and using your own images rather than ones used by other sites.

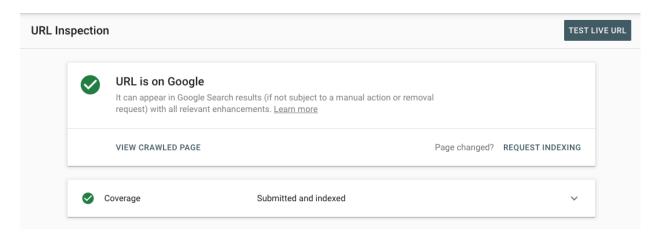
### Indexability

Search engine crawlers visit web pages to analyze their content and then store them in Google's index. It's these indexed pages that appear in SERPs—so if your content isn't indexed, it won't show up in search results.

To find out whether your site has any indexability issues, use GSC. Click Coverage (under Index) in the sidebar. It'll show any non-indexed pages as errors.



To find out if a specific page has been indexed, you can look it up using GSC's URL Inspection Tool.

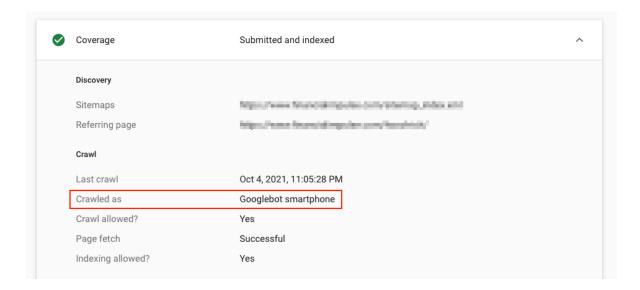


If a page isn't indexed, the URL Inspection Tool will tell you. Click the Request Indexing button to bring it to Google's attention. You can also do this for pages that are already indexed but that have been updated recently.

## **Mobile-first indexing**

With more and more users browsing content on their phones, Google has shifted to mobile-first indexing.

What this means: Google crawls and indexes sites' mobile versions. You can confirm this in GSC's Coverage report, which shows how Google crawls your site.



For most businesses, this won't cause major problems. It's a bigger concern for websites that have very different desktop and mobile versions—for example, less content on their mobile site or different URLs (www.example.com vs. m.example.com).

If you do hide content on your mobile site or use separate URLs for a mobile and desktop version, stop. Work with your developer to ensure that your content is the same on both mobile and desktop.

### Mobile usability

While your website content should be the same on both mobile and desktop, it should be just as accessible on mobile as it is on desktop. This is the concept of mobile usability, which is separate from mobile-first indexing.

It's not about having the same exact appearance on different devices. Rather, making your site mobile-friendly means visitors can easily navigate it and read content despite viewing it on a smaller screen.

Use Google's Mobile-Friendly Test to find out whether your site is mobile-friendly. Bring up any identified issues with your web developer.

Some tactics for better usability:

 Use a responsive web design. Responsive designs adapt content to the device it's being viewed on—for example, landscape-orientation pages become oriented for portrait, and images automatically resize. This way, users don't have to pinch and zoom.

- Many CMS platforms like WordPress offer responsive site themes so you don't necessarily need a developer's help here. Rather, switch to a responsive theme for your site.
- Disable intrusive pop-ups on mobile. These are the pop-ups that cover content and must be dismissed before users can read your page. Most pop-up plugins have smart targeting that let you specify where these show. Non-intrusive pop-ups, like slide-ins, are preferred since they don't disrupt the user experience.
- Improve page speed. Pages should load in under 3 seconds. A slow user experience makes it harder for users to find what they're looking for on your site. We've covered a few tactics like compressing your images to improve page speed, but here are a few more:
  - Minify code. Use tools like HTMLMinifier or CSSNano to remove excessive code from your site HTML, CSS or JavaScript. Google lists a few more resources here.
  - Compress files. It's not just images, you should compress all files whenever possible to keep them as small as possible. Here are a few compression software recommendations.
  - Cut down on redirects. Multiple redirects can cause excessive HTTP requests, which will make your page slow to a halt.
  - Improve your server response time. To troubleshoot your server response, Google recommends identifying pain points by paying attention to the "Time To First Byte," which "represents the time that it takes for a user's browser to receive the first byte of page content."
  - Check your page speed: Use a site like Pingdom to find out how quickly your page loads. You can also use Google's tool, PageSpeed Insights, to analyze your site's speed