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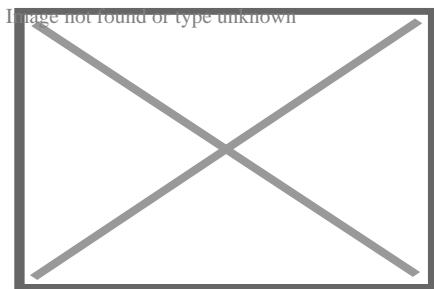
About Web design

Web design encompasses many different skills and disciplines in the production and maintenance of **websites**. The different areas of web design include web graphic design; **user interface design** (UI design); authoring, including standardised code and **proprietary software**; **user experience design** (UX design); and **search engine optimization**. Often many individuals will work in teams covering different aspects of the design process, although some designers will cover them all.^[1] The term "web design" is normally used to describe the design process relating to the front-end (client side) design of a website including writing **markup**. Web design partially overlaps **web engineering** in the broader scope of **web development**. Web designers are expected to have an awareness of **usability** and be up to date with **web accessibility** guidelines.

History

[\[edit\]](#)

See also: [History of the World Wide Web](#)



Web design books in a store

1988–2001

[\[edit\]](#)

Although web design has a fairly recent history, it can be linked to other areas such as graphic design, user experience, and multimedia arts, but is more aptly seen from a technological standpoint. It has become a large part of people's everyday lives. It is hard to imagine the Internet without animated graphics, different styles of **typography**, backgrounds, videos and music. The web was announced on August 6, 1991; in November 1992, **CERN** was the first website to go live on the World Wide Web. During this period, websites were structured by using the `<table>` tag which created numbers on the website. Eventually, web designers were able to find their way around it to create more structures and formats. In early history, the structure of the websites was fragile and hard to contain, so it became very difficult to use them. In November 1993, **ALIWEB** was the first ever search engine to be created (Archie Like Indexing for the WEB).^[2]

The start of the web and web design

[edit]

In 1989, whilst working at CERN in Switzerland, British scientist Tim Berners-Lee proposed to create a global **hypertext** project, which later became known as the **World Wide Web**. From 1991 to 1993 the World Wide Web was born. **Text-only HTML** pages could be viewed using a simple line-mode **web browser**.^[3] In 1993 Marc Andreessen and Eric Bina, created the **Mosaic browser**. At the time there were multiple browsers, however the majority of them were Unix-based and naturally text-heavy. There had been no integrated approach to **graphic design** elements such as **images** or **sounds**. The **Mosaic browser** broke this mould.^[4] The **W3C** was created in October 1994 to "lead the World Wide Web to its full potential by developing common **protocols** that promote its evolution and ensure its **interoperability**."^[5] This discouraged any one company from monopolizing a proprietary browser and **programming language**, which could have altered the effect of the World Wide Web as a whole. The W3C continues to set standards, which can today be seen with **JavaScript** and other languages. In 1994 Andreessen formed Mosaic Communications Corp. that later became known as **Netscape Communications**, the **Netscape 0.9 browser**. Netscape created its HTML tags without regard to the traditional standards process. For example, Netscape 1.1 included tags for changing background colours and formatting text with **tables** on web pages. From 1996 to 1999 the **browser wars** began, as **Microsoft** and **Netscape** fought for ultimate browser dominance. During this time there were many new technologies in the field, notably **Cascading Style Sheets**, **JavaScript**, and **Dynamic HTML**. On the whole, the browser competition did lead to many positive creations and helped web design evolve at a rapid pace.^[6]

Evolution of web design

[edit]

In 1996, Microsoft released its first competitive browser, which was complete with its features and HTML tags. It was also the first browser to support style sheets, which at the time was seen as an obscure authoring technique and is today an important aspect of web design.^[6] The **HTML markup** for **tables** was originally intended for displaying tabular data. However, designers quickly realized the potential of using HTML tables for creating complex, multi-column layouts that were otherwise not possible. At this time, as design and good aesthetics seemed to take precedence over good markup structure, little attention was paid to semantics and **web accessibility**. HTML sites were limited in their design options, even more so with earlier versions of HTML. To create complex designs, many web designers had to use complicated table structures or even use blank **spacer .GIF** images to stop empty table cells from collapsing.^[7] **CSS** was introduced in December 1996 by the **W3C** to support presentation and layout. This allowed **HTML** code to be semantic rather than both semantic and presentational and improved web accessibility, see **tableless web design**.

In 1996, **Flash** (originally known as FutureSplash) was developed. At the time, the Flash content development tool was relatively simple compared to now, using basic layout and drawing tools, a limited precursor to **ActionScript**, and a timeline, but it enabled web designers to go beyond the point of HTML, **animated GIFs** and **JavaScript**. However, because Flash required a **plug-in**, many web developers avoided using it for fear of limiting their market share due to lack of compatibility. Instead, designers reverted to **GIF** animations (if they did not forego using **motion graphics** altogether) and JavaScript for **widgets**. But the benefits of Flash made it popular enough among specific target markets to eventually work its way to the vast majority of browsers, and powerful enough to be used to develop entire sites.[7]

End of the first browser wars

[edit]

Further information: **Browser wars § First Browser War (1995–2001)**

In 1998, Netscape released Netscape Communicator code under an **open-source licence**, enabling thousands of developers to participate in improving the software. However, these developers decided to start a standard for the web from scratch, which guided the development of the open-source browser and soon expanded to a complete application platform.[6] The **Web Standards Project** was formed and promoted browser compliance with **HTML** and **CSS** standards. Programs like **Acid1**, **Acid2**, and **Acid3** were created in order to test browsers for compliance with web standards. In 2000, Internet Explorer was released for Mac, which was the first browser that fully supported HTML 4.01 and CSS 1. It was also the first browser to fully support the **PNG** image format.[6] By 2001, after a campaign by Microsoft to popularize Internet Explorer, Internet Explorer had reached 96% of **web browser usage share**, which signified the end of the first browser wars as Internet Explorer had no real competition.[8]

2001–2012

[edit]

Since the start of the 21st century, the web has become more and more integrated into people's lives. As this has happened the technology of the web has also moved on. There have also been significant changes in the way people use and access the web, and this has changed how sites are designed.

Since the end of the **browsers wars**^[*when?*] new browsers have been released. Many of these are **open source**, meaning that they tend to have faster development and are more supportive of new standards. The new options are considered by many^[*weasel words*] to be better than Microsoft's **Internet Explorer**.

The **W3C** has released new standards for HTML (**HTML5**) and CSS (**CSS3**), as well as new **JavaScript APIs**, each as a new but individual standard.^[*when?*] While the term HTML5 is only used to refer to the new version of HTML and *some* of the JavaScript APIs, it has become

common to use it to refer to the entire suite of new standards (HTML5, CSS3 and JavaScript).

2012 and later

[\[edit\]](#)

With the advancements in **3G** and **LTE** internet coverage, a significant portion of website traffic shifted to mobile devices. This shift influenced the web design industry, steering it towards a minimalist, lighter, and more simplistic style. The "mobile first" approach emerged as a result, emphasizing the creation of website designs that prioritize mobile-oriented layouts first, before adapting them to larger screen dimensions.

Tools and technologies

[\[edit\]](#)

Web designers use a variety of different tools depending on what part of the production process they are involved in. These tools are updated over time by newer standards and software but the principles behind them remain the same. Web designers use both **vector** and **raster** graphics editors to create web-formatted imagery or design prototypes. A website can be created using **WYSIWYG website builder** software or a **content management system**, or the individual web pages can be **hand-coded** in just the same manner as the first web pages were created. Other tools web designers might use include markup **validators**^[9] and other testing tools for usability and accessibility to ensure their websites meet web accessibility guidelines.^[10]

UX Design

[\[edit\]](#)

One popular tool in web design is UX Design, a type of art that designs products to perform an accurate user background. UX design is very deep. UX is more than the web, it is very independent, and its fundamentals can be applied to many other browsers or apps. Web design is mostly based on web-based things. UX can overlap both web design and design. UX design mostly focuses on products that are less web-based.^[11]

Skills and techniques

[\[edit\]](#)

Marketing and communication design

[\[edit\]](#)

Marketing and communication design on a website may identify what works for its target market. This can be an age group or particular strand of culture; thus the designer may understand the

trends of its audience. Designers may also understand the type of website they are designing, meaning, for example, that (B2B) **business-to-business** website design considerations might differ greatly from a consumer-targeted website such as a **retail** or entertainment website. Careful consideration might be made to ensure that the aesthetics or overall design of a site do not clash with the clarity and accuracy of the content or the ease of **web navigation**,^[12] especially on a B2B website. Designers may also consider the reputation of the owner or business the site is representing to make sure they are portrayed favorably. Web designers normally oversee all the websites that are made on how they work or operate on things. They constantly are updating and changing everything on websites behind the scenes. All the elements they do are text, photos, graphics, and layout of the web. Before beginning work on a website, web designers normally set an appointment with their clients to discuss layout, colour, graphics, and design. Web designers spend the majority of their time designing websites and making sure the speed is right. Web designers typically engage in testing and working, marketing, and communicating with other designers about laying out the websites and finding the right elements for the websites.^[13]

User experience design and interactive design

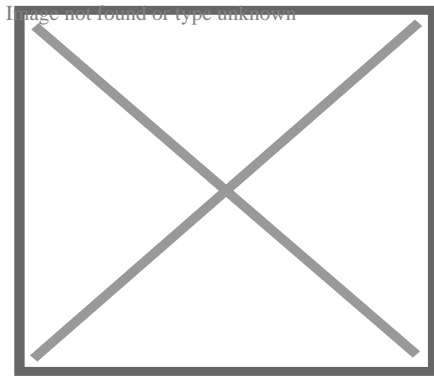
[edit]

User understanding of the content of a website often depends on user understanding of how the website works. This is part of the **user experience design**. User experience is related to layout, clear instructions, and labeling on a website. How well a user understands how they can interact on a site may also depend on the **interactive design** of the site. If a user perceives the usefulness of the website, they are more likely to continue using it. Users who are skilled and well versed in website use may find a more distinctive, yet less intuitive or less **user-friendly** website interface useful nonetheless. However, users with less experience are less likely to see the advantages or usefulness of a less intuitive website interface. This drives the trend for a more universal user experience and ease of access to accommodate as many users as possible regardless of user skill.^[14] Much of the user experience design and interactive design are considered in the **user interface design**.

Advanced interactive functions may require **plug-ins** if not advanced coding language skills. Choosing whether or not to use interactivity that requires plug-ins is a critical decision in user experience design. If the plug-in doesn't come pre-installed with most browsers, there's a risk that the user will have neither the know-how nor the patience to install a plug-in just to access the content. If the function requires advanced coding language skills, it may be too costly in either time or money to code compared to the amount of enhancement the function will add to the user experience. There's also a risk that advanced interactivity may be incompatible with older browsers or hardware configurations. Publishing a function that doesn't work reliably is potentially worse for the user experience than making no attempt. It depends on the target audience if it's likely to be needed or worth any risks.

Progressive enhancement

[[edit](#)]



The order of progressive enhancement

Main article: [Progressive enhancement](#)

Progressive enhancement is a strategy in web design that puts emphasis on [web content](#) first, allowing [everyone to access](#) the basic content and functionality of a web page, whilst [users](#) with additional browser features or faster Internet access receive the enhanced version instead.

In practice, this means serving content through [HTML](#) and applying styling and animation through [CSS](#) to the technically possible extent, then applying further enhancements through [JavaScript](#). Pages' text is loaded immediately through the HTML source code rather than having to wait for JavaScript to initiate and load the content subsequently, which allows content to be readable with minimum loading time and bandwidth, and through [text-based browsers](#), and maximizes [backwards compatibility](#).^[15]

As an example, [MediaWiki](#)-based sites including Wikipedia use progressive enhancement, as they remain usable while JavaScript and even CSS is deactivated, as pages' content is included in the page's HTML source code, whereas counter-example [Everipedia](#) relies on JavaScript to load pages' content subsequently; a blank page appears with JavaScript deactivated.

Page layout

[[edit](#)]

Part of the user interface design is affected by the quality of the [page layout](#). For example, a designer may consider whether the site's page layout should remain consistent on different pages when designing the layout. Page pixel width may also be considered vital for aligning objects in the layout design. The most popular fixed-width websites generally have the same set width to match the current most popular browser window, at the current most popular screen resolution, on the current most popular monitor size. Most pages are also center-aligned for concerns of [aesthetics](#) on larger screens.

Fluid layouts increased in popularity around 2000 to allow the browser to make user-specific layout adjustments to fluid layouts based on the details of the reader's screen (window size, font

size relative to window, etc.). They grew as an alternative to HTML-table-based layouts and **grid-based design** in both page layout design principles and in coding technique but were very slow to be adopted.^[note 1] This was due to considerations of **screen reading devices** and varying windows sizes which designers have no control over. Accordingly, a design may be broken down into units (sidebars, content blocks, **embedded advertising** areas, navigation areas) that are sent to the browser and which will be fitted into the display window by the browser, as best it can. Although such a display may often change the relative position of major content units, sidebars may be displaced below **body text** rather than to the side of it. This is a more flexible display than a hard-coded grid-based layout that doesn't fit the device window. In particular, the relative position of content blocks may change while leaving the content within the block unaffected. This also minimizes the user's need to horizontally scroll the page.

Responsive web design is a newer approach, based on CSS3, and a deeper level of per-device specification within the page's style sheet through an enhanced use of the CSS @media rule. In March 2018 Google announced they would be rolling out mobile-first indexing.^[16] Sites using responsive design are well placed to ensure they meet this new approach.

Typography

^[edit]

Main article: **typography**

Web designers may choose to limit the variety of website typefaces to only a few which are of a similar style, instead of using a wide range of **typefaces** or **type styles**. Most browsers recognize a specific number of safe fonts, which designers mainly use in order to avoid complications.

Font downloading was later included in the CSS3 fonts module and has since been implemented in Safari 3.1, **Opera 10**, and **Mozilla Firefox 3.5**. This has subsequently increased interest in **web typography**, as well as the usage of font downloading.

Most site layouts incorporate negative space to break the text up into paragraphs and also avoid center-aligned text.^[17]

Motion graphics

^[edit]

The page layout and user interface may also be affected by the use of motion graphics. The choice of whether or not to use motion graphics may depend on the target market for the website. Motion graphics may be expected or at least better received with an entertainment-oriented website. However, a website target audience with a more serious or formal interest (such as business, community, or government) might find animations unnecessary and distracting if only for entertainment or decoration purposes. This doesn't mean that more serious content couldn't be enhanced with animated or video presentations that is relevant to the content. In either case, **motion graphic design** may make the difference between more effective visuals or distracting

visuals.

Motion graphics that are not initiated by the site visitor can produce accessibility issues. The World Wide Web consortium accessibility standards require that site visitors be able to disable the animations.[18]

Quality of code

[[edit](#)]

Website designers may consider it to be good practice to conform to standards. This is usually done via a description specifying what the element is doing. Failure to conform to standards may not make a website unusable or error-prone, but standards can relate to the correct layout of pages for readability as well as making sure coded elements are closed appropriately. This includes errors in code, a more organized layout for code, and making sure IDs and classes are identified properly. Poorly coded pages are sometimes colloquially called [tag soup](#). [Validating via W3C](#)[9] can only be done when a correct DOCTYPE declaration is made, which is used to highlight errors in code. The system identifies the errors and areas that do not conform to web design standards. This information can then be corrected by the user.[19]

Generated content

[[edit](#)]

There are two ways websites are generated: statically or dynamically.

Static websites

[[edit](#)]

Main article: [Static web page](#)

A static website stores a unique file for every page of a static website. Each time that page is requested, the same content is returned. This content is created once, during the design of the website. It is usually manually authored, although some sites use an automated creation process, similar to a dynamic website, whose results are stored long-term as completed pages. These automatically created static sites became more popular around 2015, with generators such as [Jekyll](#) and [Adobe Muse](#).[20]

The benefits of a static website are that they were simpler to host, as their server only needed to serve static content, not execute server-side scripts. This required less server administration and had less chance of exposing security holes. They could also serve pages more quickly, on low-cost server hardware. This advantage became less important as cheap web hosting expanded to also offer dynamic features, and [virtual servers](#) offered high performance for short intervals at low cost.

Almost all websites have some static content, as supporting assets such as images and style sheets are usually static, even on a website with highly dynamic pages.

Dynamic websites

[[edit](#)]

Main article: [Dynamic web page](#)

Dynamic websites are generated on the fly and use server-side technology to generate web pages. They typically extract their content from one or more back-end databases: some are database queries across a relational database to query a catalog or to summarise numeric information, and others may use a [document database](#) such as [MongoDB](#) or [NoSQL](#) to store larger units of content, such as blog posts or wiki articles.

In the design process, dynamic pages are often mocked-up or [wireframed](#) using static pages. The skillset needed to develop dynamic web pages is much broader than for a static page, involving server-side and database coding as well as client-side interface design. Even medium-sized dynamic projects are thus almost always a team effort.

When dynamic web pages first developed, they were typically coded directly in languages such as [Perl](#), [PHP](#) or [ASP](#). Some of these, notably PHP and ASP, used a 'template' approach where a server-side page resembled the structure of the completed client-side page, and data was inserted into places defined by 'tags'. This was a quicker means of development than coding in a purely procedural coding language such as Perl.

Both of these approaches have now been supplanted for many websites by higher-level application-focused tools such as [content management systems](#). These build on top of general-purpose coding platforms and assume that a website exists to offer content according to one of several well-recognised models, such as a time-sequenced [blog](#), a thematic magazine or news site, a wiki, or a user forum. These tools make the implementation of such a site very easy, and a purely organizational and design-based task, without requiring any coding.

Editing the content itself (as well as the template page) can be done both by means of the site itself and with the use of third-party software. The ability to edit all pages is provided only to a specific category of users (for example, administrators, or registered users). In some cases, anonymous users are allowed to edit certain web content, which is less frequent (for example, on forums - adding messages). An example of a site with an anonymous change is [Wikipedia](#).

Homepage design

[[edit](#)]

Usability experts, including [Jakob Nielsen](#) and Kyle Soucy, have often emphasised homepage design for website success and asserted that the homepage is the most important page on a website.^[21] *Nielsen, Jakob; Tahir, Marie (October 2001), [Homepage Usability: 50 Websites](#)*

Deconstructed, New Riders Publishing, ISBN 978-0-7357-1102-0[22][23] However practitioners into the 2000s were starting to find that a growing number of website traffic was bypassing the homepage, going directly to internal content pages through search engines, e-newsletters and RSS feeds.[24] This led many practitioners to argue that homepages are less important than most people think.[25][26][27][28] Jared Spool argued in 2007 that a site's homepage was actually the least important page on a website.[29]

In 2012 and 2013, carousels (also called 'sliders' and 'rotating banners') have become an extremely popular design element on homepages, often used to showcase featured or recent content in a confined space.[30] Many practitioners argue that carousels are an ineffective design element and hurt a website's search engine optimisation and usability.[30][31][32]

Occupations

[edit]

There are two primary jobs involved in creating a website: the web designer and **web developer**, who often work closely together on a website.[33] The web designers are responsible for the visual aspect, which includes the layout, colouring, and typography of a web page. Web designers will also have a working knowledge of **markup languages** such as HTML and CSS, although the extent of their knowledge will differ from one web designer to another. Particularly in smaller organizations, one person will need the necessary skills for designing and programming the full web page, while larger organizations may have a web designer responsible for the visual aspect alone.

Further jobs which may become involved in the creation of a website include:

- **Graphic designers** to create visuals for the site such as logos, layouts, and buttons
- Internet marketing specialists to help maintain web presence through strategic solutions on targeting viewers to the site, by using marketing and promotional techniques on the internet
- SEO writers to research and recommend the correct words to be incorporated into a particular website and make the website more accessible and found on numerous search engines
- Internet copywriter to create the written content of the page to appeal to the targeted viewers of the site[1]
- User experience (**UX**) **designer** incorporates aspects of user-focused design considerations which include information architecture, user-centred design, user testing, interaction design, and occasionally visual design.

Artificial intelligence and web design

[edit]

Chat GPT and other AI models are being used to write and code websites making it faster and easier to create websites. There are still discussions about the ethical implications on using

artificial intelligence for design as the world becomes more familiar with using AI for time-consuming tasks used in design processes.[34]

See also

[[edit](#)]

- o  [Internet portal](#) Image not found or type unknown

- o [Aesthetics](#)
- o [Color theory](#)
- o [Composition \(visual arts\)](#)
- o [Cross-browser](#)
- o [Design education](#)
- o [Drawing](#)
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Related disciplines

[[edit](#)]

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- o [Interaction design](#)
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- o [Web animations](#)

Notes

[[edit](#)]

1. ^ [<table>-based markup](#) and [spacer .GIF](#) images

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[edit]

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External links

[edit]

- W3C consortium for web standards

Web design at Wikipedia's sister projects:

-  **Media** from Commons
-  **Resources** from Wikiversity

- United States
- France
- BnF data
- not found or type unknown
- this is Wikidata
- Japan
- Czech Republic
- Israel

Authority control databases: National

- **v**
- **t**
- **e**

Design

- Outline
- Designer

Disciplines

Communication design

- Advertising
- Book design
- Brand design
- Exhibit design
- Film title design
- Graphic design
 - Motion
 - Postage stamp design
 - Print design
- Illustration
- Information design
- Instructional design
- News design
- Photography
- Retail design
- Signage / Traffic sign design
- Typography / Type design
- Video design
- Visual merchandising

Environmental design

- Architecture
- Architectural lighting design
- Building design
 - Passive solar
- Ecological design
- Environmental impact design
- Garden design
 - Computer-aided
- Healthy community design
- Hotel design
- Interior architecture
- Interior design
 - EID
- Keyline design
- Landscape architecture
 - Sustainable
- Landscape design
- Spatial design
- Urban design

- Automotive design
- Automotive suspension design
- CMF design
- Corrugated box design

Approaches

- Active
- Activity-centered
- Adaptive web
- Affective
- Brainstorming
- By committee
- By contract
- C-K theory
- Closure
- Co-design
- Concept-oriented
- Configuration
- Contextual
- Continuous
- Cradle-to-cradle
- Creative problem-solving
- Creativity techniques
- Critical
 - Design fiction
- Defensive
- Design–bid–build
- Design–build
 - architect-led
- Diffuse
- Domain-driven
- Ecological design
- Energy neutral
- Engineering design process
 - Probabilistic design
- Ergonomic
- Error-tolerant
- Evidence-based
- Fault-tolerant
- Framework-oriented
- For assembly
- For behaviour change
- For manufacturability
- For Six Sigma
- For testing
- For the environment
- For X
- Functional
- Generative
- Geodesign
- HCD
- High-level
- Hostile

- **Tools**
- **Intellectual property**
 - **Organizations**
 - **Awards**

Tools

- AAD
- Architectural model
- Blueprint
- Comprehensive layout
- CAD
 - CAID
 - Virtual home design software
- CAutoD
- Design quality indicator
- Electronic design automation
- Flowchart
- Mockup
- Design specification
- Prototype
- Sketch
- Storyboard
- Technical drawing
- HTML editor
- Website wireframe

Intellectual property

- Clean-room design
- Community design
- Design around
- Design infringement
- Design patent
- Fashion design copyright
- *Geschmacksmuster*
- Industrial design rights
 - European Union

Organizations

- American Institute of Graphic Arts
- Chartered Society of Designers
- Design and Industries Association
- Design Council
- International Forum Design
- Design Research Society

- European Design Award
- German Design Award

Related topics

- Agile
- Concept art
- Conceptual design
- Creative industries
- Cultural icon
- .design
- Dominant design
- Enterprise architecture
- Form factor
- Futures studies
- Indie design
- Innovation management
- Intelligent design
- Lean startup
- New product development
- OODA loop
- Philosophy of design
- Process simulation
- Reference design
- Slow design
- STEAM fields
- Unintelligent design
- Visualization
- Wicked problem
- Design attributes
 - brief
 - change
 - classic
 - competition
 - architectural
 - student
 - director
 - education
 - elements
 - engineer
 - firm
 - history
 - knowledge
 - language
 - life
 - load
 - museum
 - optimization
 - paradigm
 - principles
 - rationale

About Web directory

A **web directory** or **link directory** is an online list or catalog of **websites**. That is, it is a directory on the **World Wide Web** of (all or part of) the World Wide Web. Historically, directories typically listed entries on people or businesses, and their contact information; such directories are still in use today. A web directory includes entries about websites, including links to those websites, organized into **categories** and subcategories.[1][2][3] Besides a link, each entry may include the title of the website, and a description of its contents. In most web directories, the entries are about whole websites, rather than individual pages within them (called "deep links"). Websites are often limited to inclusion in only a few categories.

There are two ways to find information on the Web: by **searching** or **browsing**. Web directories provide links in a structured list to make browsing easier. Many web directories combine searching and browsing by providing a search engine to search the directory. Unlike search engines, which base results on a database of entries gathered automatically by **web crawler**, most web directories are built manually by human editors. Many web directories allow site owners to submit their site for inclusion, and have editors review submissions for fitness.

Web directories may be general in scope, or limited to particular subjects or fields. Entries may be listed for free, or by paid submission (meaning the site owner must pay to have his or her website listed).

RSS directories are similar to web directories, but contain collections of **RSS feeds**, instead of links to websites.

History

[[edit](#)]

During the early development of the web, there was a list of **web servers** edited by **Tim Berners-Lee** and hosted on the **CERN** webserver. One historical snapshot from 1992 remains.[4] He also created the **World Wide Web Virtual Library**, which is the oldest web directory.[5]

Scope of listing

[[edit](#)]

Most of the directories are general in on scope and list websites across a wide range of categories, regions and languages. But some niche directories focus on restricted regions, single languages, or specialist sectors. For example, there are shopping directories that specialize in the listing of retail **e-commerce** sites.

Examples of well-known general web directories are **Yahoo! Directory** (shut down at the end of 2014) and **DMOZ** (shut down on March 14, 2017). DMOZ was significant due to its extensive categorization and large number of listings and its **free availability** for use by other directories and search engines.^[6]

However, a debate over the quality of directories and databases still continues, as search engines use DMOZ's content without real integration, and some experiment using **clustering**.

Development

[\[edit\]](#)



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There have been many attempts to make building web directories easier, such as using automated submission of related links by script, or any number of available **PHP** portals and programs. Recently, **social software** techniques have spawned new efforts of categorization, with **Amazon.com** adding **tagging** to their product pages.

Monetizing

[\[edit\]](#)

Directories have various features in their listings, often depending upon the price paid for inclusion:

- Cost
 - Free submission – there is no charge for the review and listing of the site
 - Paid submission – a one-time or recurring fee is charged for reviewing/listing the submitted link
- **No follow** – there is a `rel="nofollow"` attribute associated with the link, meaning search engines will give no weight to the link
- Featured listing – the link is given a premium position in a category (or multiple categories) or other sections of the directory, such as the homepage. Sometimes called sponsored listing.
- Bid for position – where sites are ordered based on bids
- **Affiliate links** – where the directory earns commission for referred customers from the listed websites
- Reciprocity
 - Reciprocal link – a link back to the directory must be added somewhere on the submitted site in order to get listed in the directory. This strategy has decreased in popularity due to changes in SEO algorithms which can make it less valuable or counterproductive.^[7]

- No Reciprocal link – a web directory where you will submit your links for free and no need to add link back to your website

Human-edited web directories

[[edit](#)]



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A human-edited directory is created and maintained by editors who add links based on the policies particular to that directory. Human-edited directories are often targeted by **SEOs** on the basis that links from reputable sources will improve rankings in the major **search engines**. Some directories may prevent search engines from rating a displayed link by using redirects, **nofollow** attributes, or other techniques. Many human-edited directories, including **DMOZ**, **World Wide Web Virtual Library**, **Business.com** and **Jasmine Directory**, are edited by volunteers, who are often experts in particular categories. These directories are sometimes criticized due to long delays in approving submissions, or for rigid organizational structures and disputes among volunteer editors.

In response to these criticisms, some volunteer-edited directories have adopted **wiki** technology, to allow broader community participation in editing the directory (at the risk of introducing lower-quality, less objective entries).

Another direction taken by some web directories is the paid for inclusion model. This method enables the directory to offer timely inclusion for submissions and generally fewer listings as a result of the paid model. They often offer additional listing options to further enhance listings, including features listings and additional links to inner pages of the listed website. These options typically have an additional fee associated but offer significant help and visibility to sites and/or their inside pages.

Today submission of websites to web directories is considered a common SEO (**search engine optimization**) technique to get back-links for the submitted website. One distinctive feature of 'directory submission' is that it cannot be fully automated like search engine submissions. Manual directory submission is a tedious and time-consuming job and is often outsourced by **webmasters**.

Bid for Position directories

[[edit](#)]



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Bid for Position directories, also known as bidding web directories, are paid-for-inclusion web directories where the listings of websites in the directory are ordered according to their bid amount. They are special in that the more a person pays, the higher up the list of websites in the directory they go. With the higher listing, the website becomes more visible and increases the chances that visitors who browse the directory will click on the listing.

Propagation

[[edit](#)]

Web directories will often make themselves accessible by more and more URLs by acquiring the domain registrations of defunct websites as soon as they expire, a practice known as [Domain drop catching](#).

See also

[[edit](#)]

- [List of web directories](#)
- [Lists of websites](#) – this itself is a web directory
- [Web portal](#)

Link destinations

- [Deep links](#)
- [Home pages](#)

Types of web directory

- [Business directory](#)

Other link organization and presentation systems

- [Webring](#)
- [Bookmark manager](#)
 - [Enterprise bookmarking](#)
 - [Social bookmarking](#)
- [Search engine](#)
 - [Search engine results page \(SERP\)](#)

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[[edit](#)]

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External links

[[edit](#)]

- [v](#)
- [t](#)
- [e](#)

[Web syndication](#)

History

[Blogging](#)
[Podcasting](#)
[Vlogging](#)
[Web syndication technology](#)

Types

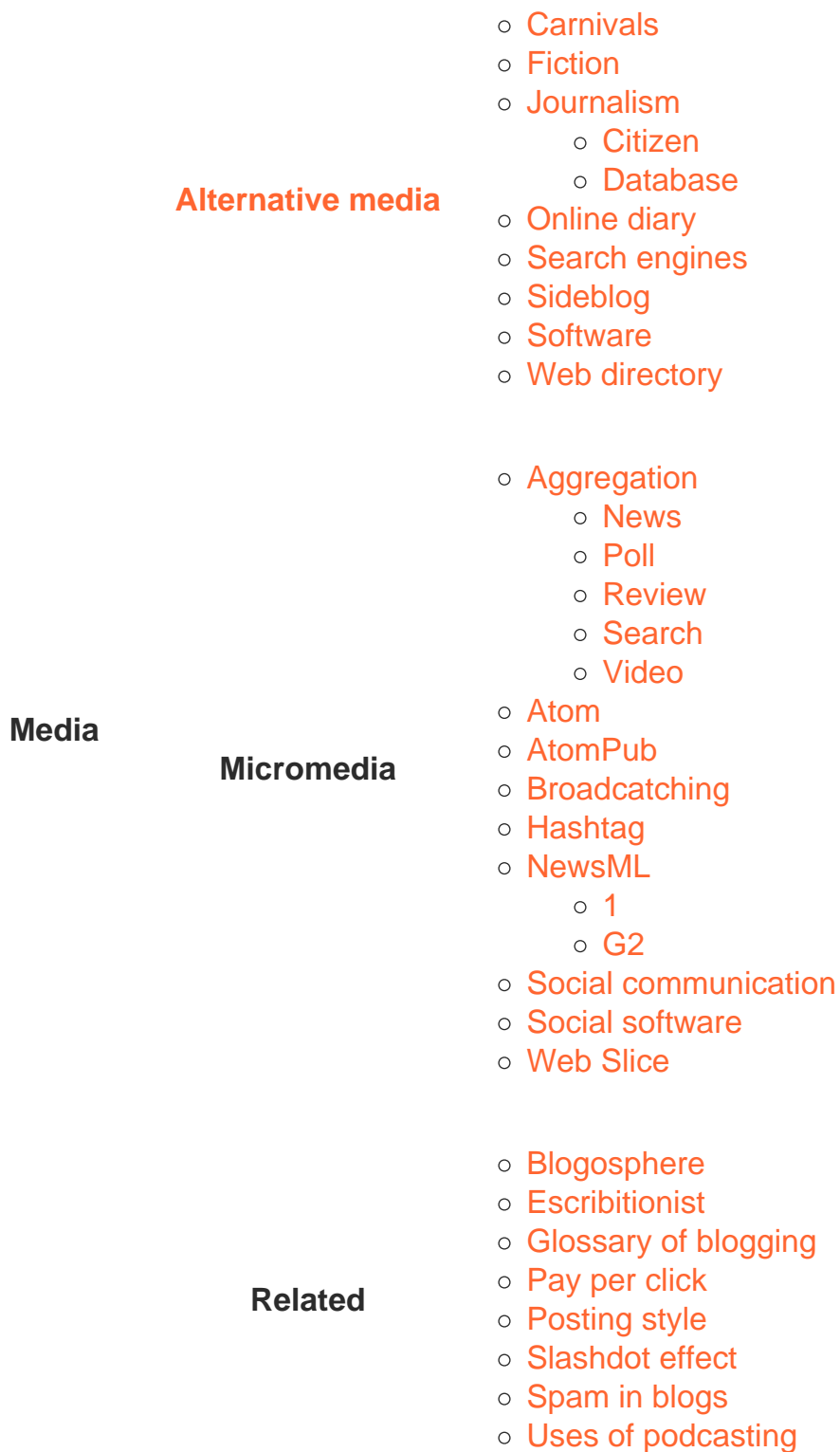
- Art
- Bloggernacle
- Classical music
- Corporate
- Dream diary
- Edublog
- Electronic journal
- Fake
- Family
- Fashion
- Food
- Health
- Law
- Lifelog
- MP3
- News
- Photoblog
- Police
- Political
- Project
- Reverse
- Travel
- Warblog

Technology	General	<ul style="list-style-type: none"> ○ BitTorrent ○ Feed URI scheme
	Features	<ul style="list-style-type: none"> ○ Linkback ○ Permalink ○ Ping ○ Pingback ○ Reblogging ○ Refback ○ Rollback ○ Trackback
	Mechanism	<ul style="list-style-type: none"> ○ Thread ○ Geotagging ○ RSS enclosure ○ Synchronization
	Memetics	<ul style="list-style-type: none"> ○ Atom feed ○ Data feed ○ Photofeed ○ Product feed ○ RDF feed ○ Web feed
	RSS	<ul style="list-style-type: none"> ○ GeoRSS ○ MRSS ○ RSS TV
	Social	<ul style="list-style-type: none"> ○ Inter-process communication ○ Mashup ○ Referencing ○ RSS editor ○ RSS tracking ○ Streaming media
	Standard	<ul style="list-style-type: none"> ○ OPML ○ RSS Advisory Board ○ Usenet ○ World Wide Web ○ XBEL ○ XOXO

- Audio podcast
- Enhanced podcast
- Mobilecast
- Narrowcasting
- Peercasting
- Screencast
- Slidecasting
- Videocast
- Webcomic
- Webtoon
- Web series

Form

- Anonymous blogging
- Collaborative blog
- Columnist
- Instant messaging
- Liveblogging
- Microblog
- Mobile blogging
- Spam blog
- Video blogging
- Motovlogging





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This article **is written like a *personal reflection, personal essay, or argumentative essay*** that states a Wikipedia editor's personal feelings or presents an original argument about a topic. Please **help improve it** by rewriting it in an **encyclopedic style**. *(January 2025)* *([Learn how and when to remove this message](#))*



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"SEO" redirects here. For other uses, see **Seo** (disambiguation).

- **v**
- **t**
- **e**

Part of a series on

Internet marketing

- Search engine optimization
- Local search engine optimisation
- Social media marketing
- Email marketing
- Referral marketing
- Content marketing
- Native advertising

Search engine marketing

- Pay-per-click
- Cost per impression
- Search analytics
- Web analytics

Display advertising

- Ad blocking
- Contextual advertising
- Behavioral targeting

Affiliate marketing

- Cost per action
- Revenue sharing

Mobile advertising

Search engine optimization (SEO) is the process of improving the quality and quantity of **website traffic** to a **website** or a **web page** from **search engines**.^{[1][2]} SEO targets unpaid search traffic (usually referred to as "**organic**" results) rather than direct traffic, referral traffic, social media traffic, or **paid traffic**.

Unpaid search engine traffic may originate from a variety of kinds of searches, including **image search**, **video search**, **academic search**,^[3] news search, and industry-specific **vertical search** engines.

As an **Internet marketing** strategy, SEO considers how search engines work, the computer-programmed **algorithms** that dictate search engine results, what people search for, the actual search queries or **keywords** typed into search engines, and which search engines are preferred by a target audience. SEO is performed because a website will receive more visitors from a search engine when websites rank higher within a **search engine results page** (SERP), with the aim of either converting the visitors or building brand awareness.^[4]

History

[\[edit\]](#)

Webmasters and content providers began optimizing websites for search engines in the mid-1990s, as the first search engines were cataloging the early **Web**. Initially, webmasters submitted the address of a page, or **URL** to the various search engines, which would send a **web crawler** to *crawl* that page, extract links to other pages from it, and return information found on the page to be **indexed**.^[5]

According to a 2004 article by former industry analyst and current **Google** employee **Danny Sullivan**, the phrase "search engine optimization" probably came into use in 1997. Sullivan credits SEO practitioner Bruce Clay as one of the first people to popularize the term.^[6]

Early versions of search **algorithms** relied on webmaster-provided information such as the keyword **meta tag** or index files in engines like **ALIWEB**. Meta tags provide a guide to each page's content. Using metadata to index pages was found to be less than reliable, however, because the webmaster's choice of keywords in the meta tag could potentially be an inaccurate representation of the site's actual content. Flawed data in meta tags, such as those that were inaccurate or incomplete, created the potential for pages to be mischaracterized in irrelevant searches.^[7]^{*[dubious – discuss]*} Web content providers also manipulated attributes within the **HTML** source of a page in an attempt to rank well in search engines.^[8] By 1997, search engine designers recognized that webmasters were making efforts to rank in search engines and that

some webmasters were **manipulating their rankings** in search results by stuffing pages with excessive or irrelevant keywords. Early search engines, such as **Altavista** and **Infoseek**, adjusted their algorithms to prevent webmasters from manipulating rankings.[9]

By heavily relying on factors such as **keyword density**, which were exclusively within a webmaster's control, early search engines suffered from abuse and ranking manipulation. To provide better results to their users, search engines had to adapt to ensure their **results pages** showed the most relevant search results, rather than unrelated pages stuffed with numerous keywords by unscrupulous webmasters. This meant moving away from heavy reliance on term density to a more holistic process for scoring semantic signals.[10]

Search engines responded by developing more complex **ranking algorithms**, taking into account additional factors that were more difficult for webmasters to manipulate.[*citation needed*]

Some search engines have also reached out to the SEO industry and are frequent sponsors and guests at SEO conferences, webchats, and seminars. Major search engines provide information and guidelines to help with website optimization.[11][12] Google has a **Sitemaps** program to help webmasters learn if Google is having any problems indexing their website and also provides data on Google traffic to the website.[13] **Bing Webmaster Tools** provides a way for webmasters to submit a sitemap and web feeds, allows users to determine the "crawl rate", and track the web pages index status.

In 2015, it was reported that **Google** was developing and promoting mobile search as a key feature within future products. In response, many brands began to take a different approach to their Internet marketing strategies.[14]

Relationship with Google

[*edit*]

In 1998, two graduate students at **Stanford University**, **Larry Page** and **Sergey Brin**, developed "Backrub", a search engine that relied on a mathematical algorithm to rate the prominence of web pages. The number calculated by the algorithm, **PageRank**, is a function of the quantity and strength of **inbound links**. [15] PageRank estimates the likelihood that a given page will be reached by a web user who randomly surfs the web and follows links from one page to another. In effect, this means that some links are stronger than others, as a higher PageRank page is more likely to be reached by the random web surfer.

Page and Brin founded Google in 1998.[16] Google attracted a loyal following among the growing number of **Internet** users, who liked its simple design.[17] Off-page factors (such as PageRank and hyperlink analysis) were considered as well as on-page factors (such as keyword frequency, **meta tags**, headings, links and site structure) to enable Google to avoid the kind of manipulation seen in search engines that only considered on-page factors for their rankings. Although PageRank was more difficult to **game**, webmasters had already developed link-building tools and schemes to influence the **Inktomi** search engine, and these methods proved similarly applicable to gaming PageRank. Many sites focus on exchanging, buying, and selling links, often on a

massive scale. Some of these schemes involved the creation of thousands of sites for the sole purpose of [link spamming](#).^[18]

By 2004, search engines had incorporated a wide range of undisclosed factors in their ranking algorithms to reduce the impact of link manipulation.^[19] The leading search engines, Google, [Bing](#), and [Yahoo](#), do not disclose the algorithms they use to rank pages. Some SEO practitioners have studied different approaches to search engine optimization and have shared their personal opinions.^[20] Patents related to search engines can provide information to better understand search engines.^[21] In 2005, Google began personalizing search results for each user. Depending on their history of previous searches, Google crafted results for logged in users.^[22]

In 2007, Google announced a campaign against paid links that transfer PageRank.^[23] On June 15, 2009, Google disclosed that they had taken measures to mitigate the effects of PageRank sculpting by use of the [nofollow](#) attribute on links. [Matt Cutts](#), a well-known software engineer at Google, announced that Google Bot would no longer treat any no follow links, in the same way, to prevent SEO service providers from using nofollow for PageRank sculpting.^[24] As a result of this change, the usage of nofollow led to evaporation of PageRank. In order to avoid the above, SEO engineers developed alternative techniques that replace nofollowed tags with obfuscated [JavaScript](#) and thus permit PageRank sculpting. Additionally, several solutions have been suggested that include the usage of [iframes](#), [Flash](#), and JavaScript.^[25]

In December 2009, Google announced it would be using the web search history of all its users in order to populate search results.^[26] On June 8, 2010 a new web indexing system called [Google Caffeine](#) was announced. Designed to allow users to find news results, forum posts, and other content much sooner after publishing than before, Google Caffeine was a change to the way Google updated its index in order to make things show up quicker on Google than before. According to Carrie Grimes, the software engineer who announced Caffeine for Google, "Caffeine provides 50 percent fresher results for web searches than our last index..."^[27] [Google Instant](#), real-time-search, was introduced in late 2010 in an attempt to make search results more timely and relevant. Historically site administrators have spent months or even years optimizing a website to increase search rankings. With the growth in popularity of social media sites and blogs, the leading engines made changes to their algorithms to allow fresh content to rank quickly within the search results.^[28]

In February 2011, Google announced the [Panda](#) update, which penalizes websites containing content duplicated from other websites and sources. Historically websites have copied content from one another and benefited in search engine rankings by engaging in this practice. However, Google implemented a new system that punishes sites whose content is not unique.^[29] The 2012 [Google Penguin](#) attempted to penalize websites that used manipulative techniques to improve their rankings on the search engine.^[30] Although Google Penguin has been presented as an algorithm aimed at fighting web spam, it really focuses on spammy links^[31] by gauging the quality of the sites the links are coming from. The 2013 [Google Hummingbird](#) update featured an algorithm change designed to improve Google's natural language processing and semantic understanding of web pages. Hummingbird's language processing system falls under the newly recognized term of "conversational search", where the system pays more attention to each word in the query in order to better match the pages to the meaning of the query rather than a few

words.[32] With regards to the changes made to search engine optimization, for content publishers and writers, Hummingbird is intended to resolve issues by getting rid of irrelevant content and spam, allowing Google to produce high-quality content and rely on them to be 'trusted' authors.

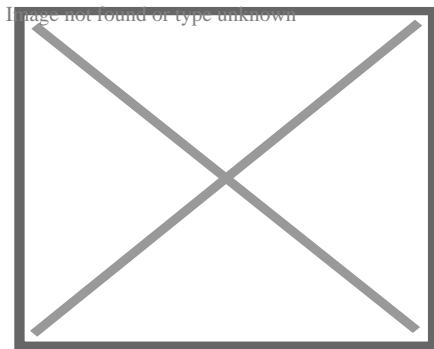
In October 2019, Google announced they would start applying **BERT** models for English language search queries in the US. Bidirectional Encoder Representations from Transformers (BERT) was another attempt by Google to improve their natural language processing, but this time in order to better understand the search queries of their users.[33] In terms of search engine optimization, BERT intended to connect users more easily to relevant content and increase the quality of traffic coming to websites that are ranking in the **Search Engine Results Page**.

Methods

[[edit](#)]

Getting indexed

[[edit](#)]



A simple illustration of the **Pagerank** algorithm. Percentage shows the perceived importance.

The leading search engines, such as Google, Bing, and Yahoo!, use **crawlers** to find pages for their algorithmic search results. Pages that are linked from other search engine-indexed pages do not need to be submitted because they are found automatically. The **Yahoo! Directory** and **DMOZ**, two major directories which closed in 2014 and 2017 respectively, both required manual submission and human editorial review.[34] Google offers **Google Search Console**, for which an XML **Sitemap** feed can be created and submitted for free to ensure that all pages are found, especially pages that are not discoverable by automatically following links[35] in addition to their URL submission console.[36] Yahoo! formerly operated a paid submission service that guaranteed to crawl for a **cost per click**;[\[37\]](#) however, this practice was discontinued in 2009.

Search engine crawlers may look at a number of different factors when **crawling** a site. Not every page is indexed by search engines. The distance of pages from the root directory of a site may also be a factor in whether or not pages get crawled.[38]

Mobile devices are used for the majority of Google searches.[39] In November 2016, Google announced a major change to the way they are crawling websites and started to make their index mobile-first, which means the mobile version of a given website becomes the starting point for what Google includes in their index.[40] In May 2019, Google updated the rendering engine of their crawler to be the latest version of Chromium (74 at the time of the announcement). Google indicated that they would regularly update the **Chromium** rendering engine to the latest version.[41] In December 2019, Google began updating the User-Agent string of their crawler to reflect the latest Chrome version used by their rendering service. The delay was to allow webmasters time to update their code that responded to particular bot User-Agent strings. Google ran evaluations and felt confident the impact would be minor.[42]

Preventing crawling

[[edit](#)]

Main article: [Robots exclusion standard](#)

To avoid undesirable content in the search indexes, webmasters can instruct spiders not to crawl certain files or directories through the standard **robots.txt** file in the root directory of the domain. Additionally, a page can be explicitly excluded from a search engine's database by using a **meta tag** specific to robots (usually `<meta name="robots" content="noindex">`). When a search engine visits a site, the robots.txt located in the **root directory** is the first file crawled. The robots.txt file is then parsed and will instruct the robot as to which pages are not to be crawled. As a search engine crawler may keep a cached copy of this file, it may on occasion crawl pages a webmaster does not wish to crawl. Pages typically prevented from being crawled include login-specific pages such as shopping carts and user-specific content such as search results from internal searches. In March 2007, Google warned webmasters that they should prevent indexing of internal search results because those pages are considered search spam.[43]

In 2020, Google **sunsetted** the standard (and open-sourced their code) and now treats it as a hint rather than a directive. To adequately ensure that pages are not indexed, a page-level robot's meta tag should be included.[44]

Increasing prominence

[[edit](#)]

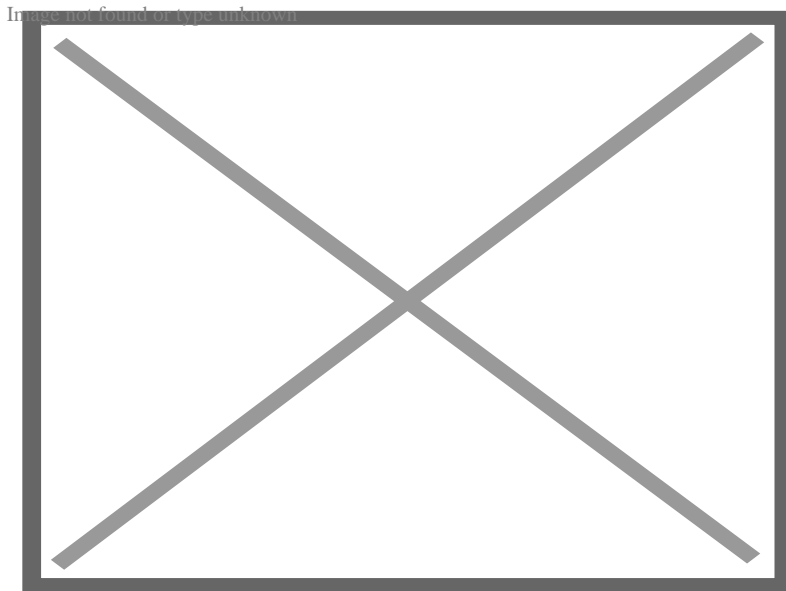
A variety of methods can increase the prominence of a webpage within the search results. **Cross linking** between pages of the same website to provide more links to important pages may improve its visibility. Page design makes users trust a site and want to stay once they find it. When people bounce off a site, it counts against the site and affects its credibility.[45]

Writing content that includes frequently searched keyword phrases so as to be relevant to a wide variety of search queries will tend to increase traffic. Updating content so as to keep search engines crawling back frequently can give additional weight to a site. Adding relevant keywords to a web page's metadata, including the **title tag and meta description**, will tend to improve the

relevancy of a site's search listings, thus increasing traffic. **URL canonicalization** of web pages accessible via multiple URLs, using the **canonical link element**[\[46\]](#) or via **301 redirects** can help make sure links to different versions of the URL all count towards the page's link popularity score. These are known as incoming links, which point to the URL and can count towards the page link's popularity score, impacting the credibility of a website.[\[45\]](#)

White hat versus black hat techniques

[\[edit\]](#)



Common white-hat methods of search engine optimization

SEO techniques can be classified into two broad categories: techniques that search engine companies recommend as part of good design ("white hat"), and those techniques of which search engines do not approve ("black hat"). Search engines attempt to minimize the effect of the latter, among them **spamdexing**. Industry commentators have classified these methods and the practitioners who employ them as either **white hat** SEO or **black hat** SEO.[\[47\]](#) White hats tend to produce results that last a long time, whereas black hats anticipate that their sites may eventually be banned either temporarily or permanently once the search engines discover what they are doing.[\[48\]](#)

An SEO technique is considered a white hat if it conforms to the search engines' guidelines and involves no deception. As the search engine guidelines[\[11\]\[12\]\[49\]](#) are not written as a series of rules or commandments, this is an important distinction to note. White hat SEO is not just about following guidelines but is about ensuring that the content a search engine indexes and subsequently ranks is the same content a user will see. White hat advice is generally summed up as creating content for users, not for search engines, and then making that content easily accessible to the online "spider" algorithms, rather than attempting to trick the algorithm from its intended purpose. White hat SEO is in many ways similar to web development that promotes accessibility,[\[50\]](#) although the two are not identical.

Black hat SEO attempts to improve rankings in ways that are disapproved of by the search engines or involve deception. One black hat technique uses hidden text, either as text colored similar to the background, in an invisible **div**, or positioned off-screen. Another method gives a different page depending on whether the page is being requested by a human visitor or a search engine, a technique known as **cloaking**. Another category sometimes used is **grey hat SEO**. This is in between the black hat and white hat approaches, where the methods employed avoid the site being penalized but do not act in producing the best content for users. Grey hat SEO is entirely focused on improving search engine rankings.

Search engines may penalize sites they discover using black or grey hat methods, either by reducing their rankings or eliminating their listings from their databases altogether. Such penalties can be applied either automatically by the search engines' algorithms or by a manual site review. One example was the February 2006 Google removal of both **BMW Germany** and **Ricoh Germany** for the use of deceptive practices.[51] Both companies subsequently apologized, fixed the offending pages, and were restored to Google's search engine results page.[52]

Companies that employ black hat techniques or other spammy tactics can get their client websites banned from the search results. In 2005, the *Wall Street Journal* reported on a company, **Traffic Power**, which allegedly used high-risk techniques and failed to disclose those risks to its clients.[53] *Wired* magazine reported that the same company sued blogger and SEO Aaron Wall for writing about the ban.[54] Google's **Matt Cutts** later confirmed that Google had banned Traffic Power and some of its clients.[55]

As marketing strategy

[edit]

SEO is not an appropriate strategy for every website, and other Internet marketing strategies can be more effective, such as paid advertising through pay-per-click (**PPC**) campaigns, depending on the site operator's goals.[editorializing] **Search engine marketing (SEM)** is the practice of designing, running, and optimizing search engine ad campaigns. Its difference from SEO is most simply depicted as the difference between paid and unpaid priority ranking in search results. SEM focuses on prominence more so than relevance; website developers should regard SEM with the utmost importance with consideration to visibility as most navigate to the primary listings of their search.[56] A successful Internet marketing campaign may also depend upon building high-quality web pages to engage and persuade internet users, setting up **analytics** programs to enable site owners to measure results, and improving a site's **conversion rate**. [57][58] In November 2015, Google released a full 160-page version of its Search Quality Rating Guidelines to the public,[59] which revealed a shift in their focus towards "usefulness" and **mobile local search**. In recent years the mobile market has exploded, overtaking the use of desktops, as shown in by **StatCounter** in October 2016, where they analyzed 2.5 million websites and found that 51.3% of the pages were loaded by a mobile device.[60] Google has been one of the companies that are utilizing the popularity of mobile usage by encouraging websites to use their **Google Search Console**, the Mobile-Friendly Test, which allows companies to measure up their website to the search engine results and determine how user-friendly their websites are. The

closer the keywords are together their ranking will improve based on key terms.[45]

SEO may generate an adequate **return on investment**. However, search engines are not paid for organic search traffic, their algorithms change, and there are no guarantees of continued referrals. Due to this lack of guarantee and uncertainty, a business that relies heavily on search engine traffic can suffer major losses if the search engines stop sending visitors.[61] Search engines can change their algorithms, impacting a website's search engine ranking, possibly resulting in a serious loss of traffic. According to Google's CEO, **Eric Schmidt**, in 2010, Google made over 500 algorithm changes – almost 1.5 per day.[62] It is considered a wise business practice for website operators to liberate themselves from dependence on search engine traffic.[63] In addition to accessibility in terms of web crawlers (addressed above), user **web accessibility** has become increasingly important for SEO.

International markets and SEO

[edit]

Optimization techniques are highly tuned to the dominant search engines in the target market. The search engines' market shares vary from market to market, as does competition. In 2003, **Danny Sullivan** stated that **Google** represented about 75% of all searches.[64] In markets outside the United States, Google's share is often larger, and data showed Google was the dominant search engine worldwide as of 2007.[65] As of 2006, Google had an 85–90% market share in Germany.[66] While there were hundreds of SEO firms in the US at that time, there were only about five in Germany.[66] As of March 2024, Google still had a significant market share of 89.85% in Germany.[67] As of June 2008, the market share of Google in the UK was close to 90% according to **Hitwise**. [68] [obsolete source] As of March 2024, Google's market share in the UK was 93.61%.[69]

Successful search engine optimization (SEO) for international markets requires more than just translating web pages. It may also involve registering a domain name with a **country-code top-level domain** (ccTLD) or a relevant **top-level domain** (TLD) for the target market, choosing web hosting with a local IP address or server, and using a **Content Delivery Network** (CDN) to improve website speed and performance globally. It is also important to understand the local culture so that the content feels relevant to the audience. This includes conducting keyword research for each market, using hreflang tags to target the right languages, and building local backlinks. However, the core SEO principles—such as creating high-quality content, improving user experience, and building links—remain the same, regardless of language or region.[66]

Regional search engines have a strong presence in specific markets:

- China: **Baidu** leads the market, controlling about 70 to 80% market share.[70]
- South Korea: Since the end of 2021, **Naver**, a domestic web portal, has gained prominence in the country.[71][72]
- Russia: **Yandex** is the leading search engine in Russia. As of December 2023, it accounted for at least 63.8% of the market share.[73]

The Evolution of International SEO

[\[edit\]](#)

By the early 2000s, businesses recognized that the web and search engines could help them reach global audiences. As a result, the need for multilingual SEO emerged.^[74] In the early years of international SEO development, simple translation was seen as sufficient. However, over time, it became clear that localization and transcreation—adapting content to local language, culture, and emotional resonance—were far more effective than basic translation.^[75]

Legal precedents

[\[edit\]](#)

On October 17, 2002, SearchKing filed suit in the [United States District Court](#), Western District of Oklahoma, against the search engine Google. SearchKing's claim was that Google's tactics to prevent spamdexing constituted a [tortious interference](#) with contractual relations. On May 27, 2003, the court granted Google's motion to dismiss the complaint because SearchKing "failed to state a claim upon which relief may be granted."^{[76][77]}

In March 2006, KinderStart filed a lawsuit against Google over search engine rankings. KinderStart's website was removed from Google's index prior to the lawsuit, and the amount of traffic to the site dropped by 70%. On March 16, 2007, the [United States District Court for the Northern District of California](#) ([San Jose](#) Division) dismissed KinderStart's complaint without leave to amend and partially granted Google's motion for [Rule 11](#) sanctions against KinderStart's attorney, requiring him to pay part of Google's legal expenses.^{[78][79]}

See also

[\[edit\]](#)

- [Competitor backlinking](#)
- [List of search engines](#)
- [Search engine marketing](#)
- [Search neutrality](#), the opposite of search manipulation
- [User intent](#)
- [Website promotion](#)
- [Search engine results page](#)
- [Search engine scraping](#)

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