



STUDIOHAWK
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Structured Data with Schema Whitepaper

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What is Structured Data?

Schema.org is the collective result of collaboration between Google, Bing, Yandex, and Yahoo to enable you to give the data their web search engines need to read and understand your content as well as give the most ideal search results corresponding to current events and time. Adding Schema mark-up to your HTML enhances the manner in which your page gets displayed in SERPs by improving the rich snippets.

Structured data (Schema mark-up) is a brilliant asset by which search engine optimizers can effectively convey the most significant data on webpages and search engines. When applied effectively, Schema mark-up provides remarkable chances to enhance a site's SEO performance by helping search engines further comprehend its content intelligently.

While Schema.org is consistently expanding and refining its documentation, Google updates its rundown of supported features that are qualified to be shown as rich, natural outcomes less frequently. When the updates are made, they are compelling since they give advertisers better ways to influence how their natural listings show up in Google's search results. To make things all the more intriguing, a portion of the current year's new Schema types offer a unique opportunity for advertisers to utilize Schema to get more clicks to more than one page on their site through only one natural posting.

The three new Schema types that are most noteworthy are FAQ, How To, and Q&A Schema; all of which present incredible chances to improve natural search traffic with catchy features. By strategically implementing these Schema types across eligible page content, advertisers can drastically expand their page's visibility in the search results for targeted keywords - particularly on mobile devices.

Pro tip: When utilizing new Schema, make sure to use the Rich Results Testing Tool to understand how your Schema can show up in Google's search results. Google Search Console additionally offers a more in-depth overview in its Rich Results Status Report.

The most frequently used Schema types

Marking up reviews is one example of using structured data, but there are many more.

Here are the most popular Schema types:

- **Article / News Article / Blog Posting**

Describes articles and blog posts. Article is a more generic Schema type, while News Article is often used by publishers. Blog Posting is usually used by organizations with websites that contain blog posts.

- **Event**

Describes an event, including its location as well as when it starts and ends.

- **Job Posting**

Describes a job posting, including its salary and employment type.

- **Local Business**

Describes a physical business, including opening hours, location, and contact information.

- **Organization**

Describes an organization, including website address, social media profiles, and contact information. It's used for organizations that people don't physically visit. For brick and mortar organizations, we have the Local Business type.

- **Person**

Describes a person; it's often used to defining the Author or other significant person in an Article.

- **Product**

Describes a product, including the brand, price, reviews, and offers.

- **Recipe**

Describes a recipe, including ingredients and pictures.

- **Review**

Describes a review of an item or a collection of items, or a critic's review.

Below are some of the important properties of the above mentioned Schema types.

Article: The Article Schema type is the parent of News Article and Blog Posting type.

This is a very generic type of Schema, which is usually not recommended. More specific types of Schema like News Article and Blog Posting are better for articles and blogs.

News Article: This type is used to mark-up news stories. Google supports improved snippets for articles, explicitly News Article, so it is further discussed below.

Blog Posting: This type is used to mark up blog articles used by individual bloggers or by organizations with blogs.

Features of News Article

It would be ideal to note that regardless of whether a news article is marked up with the News Article Schema type, search engines may in any case demonstrate an improved snippet. In Google's case, there's a screening procedure that is necessary for the mark ups to be incorporated into those articles. Just marking up articles with the News Article Schema type doesn't mean it consequently gets into the search

results. Web search tools can distinguish your news story only to a certain degree.

Google distinguishes between required and recommended properties when it comes to Schema. Even though some properties aren't required by Google, they are highly recommended. Google further distinguishes between AMP and non-AMP news articles. It requires more properties for AMP marked up news articles.

Described below are the required properties for non-AMP news articles.

Property	Type	Description
Headline	Text	The article's headline - a maximum of 110 characters.
Image	Image object or URL	One or more images, at least 696 px wide.

Described below are the recommended properties for non-AMP news articles.

Property	Type	Description
datePublished	Date	The date when the article was published.
author	Person	The definition of the author.
publisher	Organization	
		The definition of the publisher.
dateModified	Date	The date when the article was last modified.
description		
	Text	A description of the article.
mainEntityOfPage	CreativeWork or URL	Indicates a page (or other CreativeWork) for which this “thing”

is the main entity
being described.

It is to be noted that in July 2018 Google changed its documentation on the News Article Schema type to specifically state that they recommend defining the properties “datePublished” and “dateModified”.

Organization

This Schema type describes an organization, including its logo, website address, social media profiles, and contact information. It is used for organizations that people don't physically visit. For organizations that people do visit, there is a separate Schema for 'LocalBusiness' type.

Features of Organization

This Schema type has only one required property.

Property	Type	Description
url	URL	The homepage URL

Recommended properties:

Property	Type	Description
logo	ImageObject or URL	The URL for the company's logo. Additional requirements:

- It must have a minimum of 112 x 112px.
- It must be in .jpg, .png, or .gif format.

Supported Platforms:

- Facebook
- Twitter
- Google+
- Instagram
- YouTube
- LinkedIn
- Myspace
- Pinterest
- SoundCloud
- Tumblr

Person

The 'Person' Schema type is used to describe a person. It's often used in relation to defining an author of an article using 'Author' but can also be used to describe a person's role within an organization.

Required Properties:

Property	Type	Description
name	Text	The name of the person.

Recommended Properties:

Property	Type	Description
url	URL	URL for the person's website.
sameAs	URL	Used to define one or more social media profiles.
birthDate	Date	The person's date of birth.
birthPlace	Place	The person's place of birth.
affiliation	Organization	

The organization
that the person's
affiliated with.

Supported Platforms:

- Facebook
- Twitter
- Google+
- Instagram
- YouTube
- LinkedIn
- Myspace
- Pinterest
- SoundCloud
- Tumblr

Implementation of Schema.org

Schema should be included directly in a page's source code. It can be implemented using the aforementioned formats:

- JavaScript Object Notation for Linked Data (JSON-LD)
- Microdata
- Resource Description Framework in Attributes (RDFa)

HowTo Schema

HowTo Schema is another new Schema type that can be used to improve articles that contain instructions on “how to” perform a task. Like FAQ Schema, Google lays out certain content requirements about what can and can’t be marked up with HowTo Schema, including:

- Not marking up offensive, violent or explicit content
- The entire content of each “step” must be marked up
- Not using HowTo markup to advertise a product
- Including relevant images, as well as materials and tools used to complete the task
- HowTo should not be used for Recipes, which have their own Schema

Unlike FAQ Schema, the text present within each HowTo step is not linkable. However, the individual steps can become links to an anchor on the page that corresponds to each step in the process, if anchored links and images are included in the HowTo markup.

HowTo has two visual layouts:

One layout includes image thumbnails for each step in the process. With this layout, users can click on each step and be taken directly to that step on the page. Anchored (#) links also appear separately in

Google Search Console, so they can track impressions and clicks to each step in your HowTo process.

The second HowTo layout uses accordions to display the steps.

One added benefit of HowTo Schema is its voice search potential: properly marked up HowTo content is [eligible to be read aloud by Google Assistant devices](#). When voice searchers ask their Google Assistants for help with a task that is best answered with a “how to” guide, content marked up with HowTo Schema will be more likely to be read aloud as the answer.

Like FAQ Schema, HowTo markup presents pros and cons for marketers. Given that the rich result takes up so much space in the SERP, it’s a great way to make your listing stand out compared to competing results. However, if users can get all the information they need from your marked-up content within the search results, it may result in fewer clicks going to your website, which coincides with Google’s [rise in no-click searches](#).

In performing out HowTo markup, it’s important to monitor the impact the Schema has on the impressions, clicks, and rankings for the page, to make sure the Schema is producing positive results for the business. For publishers whose sites rely on ad revenue, the potential loss in click-through-rate might not be worth the enhanced appearance of HowTo markup in the search results.

Featured snippets for “how to” queries

Given that virtually every “How To” query generates a Featured Snippet result, there arose a question if there was any correlation between implementing HowTo Schema and earning Featured Snippets. An analysis was conducted of 420 URLs currently ranking in Featured Snippets for common “how to” queries, and only 3 these pages are currently using HowTo markup. While this Schema type is still relatively new, it doesn’t appear to be the case that using HowTo markup is a prerequisite for earning the Featured Snippet for “how to” queries.

Q&A Schema

Q&A Schema is another new Schema type used for pages that contain a question, and a way for users to submit answers to that question. The Q&A Schema should be applied only on pages that have one question as the main focus on the page — not a variety of different questions. In [its documentation](#), Google also distinguishes between Q&A and FAQ markup: If users are not able to add their own answers to the question, FAQ markup should be used instead.

Q&A Schema is great for forums or other online message boards where users can ask a question, and the community can submit answers, such as the [Moz Q&A Forum](#).

Google strongly recommends that Q&A Schema include a URL that links directly to each individual answer to improve user experience. As with HowTo Schema, this can be done using anchor (#) links, which can then be monitored individually in Google Search Console.

Testing the Schema.org implementation

Step 1: Check for the presence of Schema

After adding Schema to the pages, users should make sure it's present by looking up the pages.

Step 2: Validate Schema implementation

Users should then test whether their structured data implementation is correct, by using Google's Structured Data Tester and choosing random pages. It is to be noted that Google's Structured Data Tester tool only supports checking URL by URL, so it can be quite time consuming.

Step 3: Keep an eye on Google's feedback

Additionally, if they've got access to Google Search Console they'll get feedback from Google on the structured data implementation in two sections: Search Appearance > Structured Data. It is important to note that this feedback is delayed, but it can be great for catching errors.

Search engines supported by Schema.org

Schema.org is an initiative that was launched in 2011 by Google, Bing, and Yahoo. A few months after its launch, Yandex joined the initiative as well.

Out of all the search engines, Google has by far the best support for Schema.org. Throughout this article we focus on implementing Schema for Google, but other search engines also support Schema.

Bing and Yahoo's support for Schema.org

In March 2018, Bing confirmed that it was supporting Schema.org. They support the following Schema types via Microformats, RDFa, and JSON-LD (similar to Google):

- Breadcrumbs
- Business / Organization
- Event
- Person
- Product and offers
- Recipe
- Review / Aggregated review / ClaimReview

More information can be found in their help section about marking up the site.

While Yahoo's webmaster resources don't say anything about support for Schema.org, they do support it. Yahoo Search, which is powered by Bing, seems to support the same Schema types as Bing does.

Yandex support for Schema.org

Yandex supports the following Schema types, via Microformats only:

- [NewsArticle / BlogPosting](#)
- [Movie](#)
- [Organization](#)
- [Product](#)
- [Questions and answers](#)
- [Recipe](#)
- [Review](#)
- [Software application \(including for games\)](#)

More information can be found in the Yandex Webmaster Support section on Schema.org.

Baidu

In 2017, Baidu mentioned that they'd their goal is to support Schema.org, but for the moment they don't support it yet.

Different search engines have different requirements

If users are dependent on multiple search engines, they may run into compatibility issues. Yandex for example requires some properties that

aren't required for Google. So, it is worthy to keep in mind that search engines may want to see different, or more complete data. It doesn't hurt to add more data; the search engines will just accumulate what they can use.

Blending Schema types

Another exciting new development with these new Schema types is the opportunity to blend multiple types of Schema that generate rich results on the same page. FAQ Schema in particular works as a great supplement to other Schema types, such as Product or Professional Service, which can generate stars, review counts, or other attributes in the SERP. Below is an example of how these combined Schema types can look on mobile:

If it makes sense for the content, it may be worth testing adding FAQ or HowTo markup to pages that already have other Schema types that generate rich results. It's possible that Google will display multiple rich result types at once for certain queries, or it could change the rich appearance of your listing depending on the query. This could potentially lead to a big increase in the click-through-rate given how much space these mixed results take up in the SERP.

Note: There is no guarantee Google will always display blended Schema types the way it currently does for websites who have already done this implementation. Google is always changing how it displays

rich results, so it's important to test this on your own pages and see what Google chooses to display.

Structured data and its involvement with higher rankings

While structured data is not a direct ranking factor, it does indirectly impact your rankings. Structured data helps users get more clicks on the snippets, leading to a higher CTR. We - and many SEOs along with us - believe that CTR does impact rankings, because it sends a quality signal to search engines.

Useful tools when working with Schema

These tools will come in handy when you're working with Schema:

- [Google's Data highlighter](#): enables users to highlight text on pages and generate JSON-LD code on the fly so they can add it later on.
- [Google's Structured Data Tester](#): enables users to validate their structured markup.

The difference between Schema, microdata, and structured data

Structured data is a system of pairing a name with a value that helps search engines categorize and index your content. Microdata is one form of structured data that works with HTML5. Schema.org is a project

that provides a particular set of agreed-upon definitions for microdata tags.

Schema vs Open Graph

Open Graph is a type of markup used by Facebook to parse out information like what image and description to display. Schema provides a more detailed list of options than Open Graph. They can be used together, but Open Graph cannot be used in place of Schema.

Impacts on click-through rate

There is some risk involved with implementing this Schema: if the content is too informational in nature, it can create a situation where users to get the answers they need entirely within the search results. This is exactly what happened when we first rolled out FAQ Schema for one of our clients at Path Interactive — impressions to the page surged, but clicks fell just as quickly.

This conundrum led to discovery of the single most exciting feature of FAQ Schema: The fact that Google supports links and other HTML within the answers. Users should look for opportunities within the FAQ answers to link to other relevant pages on their site, and they can use FAQ Schema to drive organic users to more than one page on their

website. This is a great way to use informational content to drive users to their product or service pages.

It is important to note that this tactic should be done within reason: The links to other pages should actually provide value to the user, and they must also be added to the page content so the Schema code is a 100 percent match with the content on the page.

Risks involved with implementing Schema

There are however a few risks involved in usage of Schema. For one, Google maintains specific criteria about how Schema should be used, and misusing the markup (whether intentionally or not) can result in a [structured data manual action](#). A common way this occurs is when the JSON-LD code includes information that is not visible for users on the page.

Secondly, it can be tempting to implement Schema markup without thoroughly thinking through the impact it can have on the click-through-rate of the page. It is possible that Schema markup can result in such a positive user experience within the SERP, that it can actually cause a decline in click-through-rate and less traffic to your site (as users get all the information they need within the search results).

These considerations require that marketers think strategically about whether and how to implement Schema to ensure they are not only complying with Google's guidelines but also using Schema in a way that will provide meaningful results for their websites.

Lastly, it is possible that Google will update its quality guidelines around how rich results are displayed if they find that these new Schema types are leading to spam or low-quality results.

It is important to avoid misusing Schema, because one stands at the risk Google taking away these fantastic opportunities to enhance our organic listings in the future.

