

Structured data



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Overview



1. Schema.org is a structured data markup schema, a semantic tagging vocabulary, supported by major search engines
2. increases organic traffic through higher quality presentation in SERPs but ranking benefit is indirect
3. many opinions and predictions on its value and future, few authoritative
4. lots of techniques, tools and services all of which work on WordPress sites

Why it matters

Google will display additional information about your content in search engine results pages. Your page's *rich snippet* makes the content more prominent and thereby increases its CTR and your traffic.

1. goal is richer search results to improve user experience
2. on-page markup (tags) helps search engines understand the information on web pages and provide richer search results
3. provides a standardized search engine "vocabulary"
4. can increase a page's rank depending on who you believe

Ways to structure data

1. microdata, microformats, rich snippets
2. Facebook has Open Graph
3. Twitter has Twitter Cards
4. Google+ has authorship

Search with [WordPress kinds of structured data](#) for more.

Ways to mark up your data



Use the schema.org vocabulary in one of 3 structured data output formats:

1. microdata (uses HTML tags and attributes to define data)
2. JSON-LD (JavaScript based)
3. RDFa (HTML based)

Examples: Product type (1)

Samsung 50 inch LED TV:

SAMSUNG 50" 5200 Series - Full HD Smart LED TV - 1080p, 60MR ...

<https://www.walmart.com/ip/SAMSUNG-J5200...LED-TV-50.../46285066> ▼

★★★★★ Rating: 4.5 - 920 votes - US\$347.99 - In stock

Sceptre X505BV-F 50" 1080p 60Hz LED HDTV. ShippingPass. **SAMSUNG 43"**

5200 Series - Full HD Smart LED TV - 1080p, 60MR (. \$277.99 List price \$749.99.

Television Type: LED TVs, Smart TVs **Refresh Rate:** 60 Hz

Model: UN50J5200AFXZA

Assembled Product Dimensions (L x W x H): 4...

Examples: Product type (2)



Millennium Falcon lego:

Amazon.com: LEGO Star Wars Millennium Falcon 75105 Building Kit ...
<https://www.amazon.com/LEGO-Millennium-Falcon-75105-Building/dp/B00WI0PJE2>
 ★★★★★ Rating: 4.8 - 350 reviews
 Travel the galaxy with Han Solo, Chewbacca and others in the iconic **Millennium Falcon**! Aim for the stars with the **Millennium Falcon** featuring streamlined ...

LEGO Star Wars Millennium Falcon (75105) - Toys"R"Us
www.toysrus.com/.../lego-star-wars-millennium-falcon-75105-6100680-54946986 ▾
 ★★★★★ Rating: 4.8 - 428 reviews - \$149.99 - In stock
 Another adventure commences in a galaxy far, far away with the **LEGO Star Wars** The Force Awakens **Millennium Falcon** Set. Join old friends, Han Solo and ...

Examples: Person/organization (1)

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About 476,000,000 results (0.60 seconds)

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www.poweredbysearch.com/ ▾
Powered by Search is Canada's fastest growing Digital Performance Marketing Agency & Google Premier Partner. Ranked on the 2016 PROFIT 500 ...

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Skip the Job. Build your career in SEO, SEM, and Inbound ...

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Powered by Search

on Google

Powered by Search's rich card
 (Powered by Search)

Examples: Person/organization (2)

Toronto SEO Guy: No-Nonsense SEO Consulting & Training: org 01a SEO consultant 2016-11-21 scn.png:

Toronto SEO Guy: No-Nonsense SEO Consulting & Training

torontoseoguy.ca/ ▼

I'm a Toronto area SEO consultant & trainer. I provide customized, no-nonsense
SEO services tailored to your business's goals, needs and budget.

Examples: Person/organization (3)

Note JSON-LD format, organization type, logo image, social media URLs, Yoast SEO plugin:

```
<script type='application/ld+json'>
{"@context":"http://schema.org","@type":"WebSite","@id":"#website","url":"http://torontoseoguy.ca/","name":"Toronto SEO
Guy","potentialAction":{"@type":"SearchAction","target":"http://torontoseoguy.ca/?s={search_term_string}","query-
input":{"required name=search_term_string"}}}</script><script type='application/ld+json'>
{"@context":"http://schema.org","@type":"Organization","url":"http://torontoseoguy.ca/","sameAs":
["https://www.linkedin.com/in/TorontoSEOguy","https://twitter.com/TorontoSEOguy"],"@id":"#organization","name":"Toronto
SEO Guy","logo":"http://torontoseoguy.ca/wp-content/uploads/2014/07/logo.png"}</script><!-- / Yoast SEO plugin. -->
```

Examples: Local business type

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[Videos](#)
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[Search tools](#)

About 175,000 results (0.97 seconds)

Map data ©2016 Google

Rating ▾

Akashiro
2.8 ★★☆☆☆ (22) · Japanese
CF Toronto Eaton Centre, 260 Yonge St
Closing soon: 10:00 PM

Spring Sushi
3.8 ★★★★★ (203) · Sushi
Modern space for Japanese & Thai fare
10 Dundas St E #4

Kyoto House
3.6 ★★★★★ (188) · Japanese
Colourful all-you-can-eat Japanese spot
143 Dundas St W

[More places](#)

Examples: Event type

<https://www.google.ca/search?q=next+leaf+game:>

Toronto Maple Leafs Tickets | Single Game Tickets & Schedule ...
www.ticketmaster.ca > [All Tickets](#) > [Sports Tickets](#) > [Hockey ▾](#)
Oct 31, 2016 - Tickets for Hockey games: buy Toronto Maple Leafs Hockey single game tickets at Ticketmaster CA. ... Results: 1 - 10 of 63 [next page](#).
Tue, Nov 22 [Toronto Maple Leafs v ...](#) Air Canada Centre, Toronto ...
Sat, Nov 26 [Toronto Maple Leafs v ...](#) Air Canada Centre, Toronto ...
Tue, Nov 29 [Edmonton Oilers v Toronto ...](#) Rogers Place, Edmonton, AB ...

Examples: Recipe type

roast chicken:

Roast Chicken | Chicken Recipes | Jamie Oliver Recipes



www.jamieoliver.com/recipes/chicken-recipes/perfect-roast-chicken/ ▾
1 hr 25 mins - 553 cal

There is nothing better than a properly cooked and delicious **roast chicken**; follow our **roast chicken** recipe for a beautifully succulent meal.

[Roast Chicken Recipe | Part One](#) · [Perfect roast chicken](#)

Juicy Roasted Chicken Recipe - Allrecipes.com



allrecipes.com ▸ [Recipes](#) ▸ [World Cuisine](#) ▸ [European](#) ▸ [German](#) ▾
★★★★★ Rating: 4.7 - 2,051 reviews - 1 hr 40 mins - 423 cal

Directions. Preheat oven to 350 degrees F (175 degrees C). Place **chicken** in a **roasting** pan, and season generously inside and out with salt and pepper. Sprinkle inside and out with onion powder. Bake uncovered 1 hour and 15 minutes in the preheated oven, to a minimum internal temperature of 180 degrees F (82 degrees C).

Examples: Other

Official Google Webmaster Central Blog: Rich Cards expands to more verticals: "Users who tap on your Rich Card will be taken near instantly to your AMP page, and be able to swipe between pages within your site."

See restaurant card 01a Google A.gif. (For some reason, that GIF image causes this page to take an inordinate amount of time to load in FF so I removed it. From the link, the image loads normally in FF.)

Schema.org types (data formats) 1

{thing}

Here are a few of the many semantic data schema types.

- organization, person
- articles, posts
- products, services
- kinds of content (event, video, movie, recipe, ratings, etc.)
- breadcrumbs (navigation) ([schema.org breadcrumbs](http://schema.org/breadcrumbs))
- local business

Schema.org types (data formats) 2



Schema.org's list of commonly used types:

- Creative works: [CreativeWork](#), [Book](#), [Movie](#), [MusicRecording](#), [Recipe](#), [TVSeries](#) ...
- Embedded non-text objects: [AudioObject](#), [ImageObject](#), [VideoObject](#)
- [Event](#)
- [Health and medical types](#): notes on the health and medical types under [MedicalEntity](#)
- [Organization](#)
- [Person](#)
- [Place](#), [LocalBusiness](#), [Restaurant](#) ...
- [Product](#), [Offer](#), [AggregateOffer](#)
- [Review](#), [AggregateRating](#)
- [Action](#)

The code (1)

The code that provides the search engines with the data:

1. using [Articles | Search | Google Developers](#) to view sample markup, JSON-LD and microdata
2. [Structured Data Testing Tool](#) takes a URL and returns what the SERP would display for the markup in the submitted page

The code (2)

The screenshot shows two news articles on a website. The first article, dated July 15, 2015, is titled "What People Love About Memory Foam" and has a description: "Many of our customers come into our showrooms wondering, 'what is it about memory foam mattresses that people really like?' Developed for...". The second article, dated July 7, 2015, is titled "5 Tips to Instantly Improve Your Night's Sleep" and has a description: "Feeling a bit more irritable than usual? Or befuddled by constant brain fog and fatigue? For many people, the solution...". Red arrows point from the headlines to the schema markup below.

Below the articles is a JSON-LD schema markup for NewsArticle. The markup is enclosed in a red box and includes a status indicator "All good" with a green checkmark.

```

{
  "@context": "http://schema.org",
  "@type": "NewsArticle",
  "headline": "What People Love About Memory Foam",
  "datePublished": "2015-07-15",
  "description": "Many of our customers come into our showrooms wondering, 'what is it about memory foam mattresses that people really like?' Developed for...",
  "image": "http://www.mattressworldnorthwest.com/wp-content/themes/mwnw/images/logo.png"
}

```

The schema markup is also shown in a table format below:

| NewsArticle 1 | |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| datePublished: | 2015-07-15 |
| headline: | What People Love About Memory Foam |
| description: | Many of our customers come into our showrooms wondering, "what is it about memory foam mattresses that people really like?" Developed for... |
| image: | http://www.mattressworldnorthwest.com/wp-content/themes/mwnw/images/logo.png |

| NewsArticle 2 | |
|----------------|---------------------------------------------------------------------------------------------------------------------------|
| datePublished: | 2015-07-07 |
| headline: | 5 Tips to Instantly Improve Your Night's Sleep |
| description: | Feeling a bit more irritable than usual? Or befuddled by constant brain fog and fatigue? For many people, the solution... |
| image: | http://www.mattressworldnorthwest.com/wp-content/uploads/2015/05/How-to-Sleep-Better1.jpg |

The code (3)

Rich Results via Structured Data Markup

The screenshot shows a rich search result for a townhome for rent. The result includes an Apple logo, the title "Townhome for Rent", a description "Entire townhome with 3 bedroom, 2 bath \$800 per night", and a rating of 4.0 stars with 255 reviews. Red arrows point from the structured data markup below to the corresponding elements in the rich result.

The structured data markup is as follows:

```

<div itemscope="true" itemtype="http://schema.org/HousingOrganization">
  <div>
    <img alt="Apple logo" data-bbox="211 768 278 803" />
    <div>
      <h3>Townhome for Rent</h3>
      <p>Entire townhome with 3 bedroom, 2 bath $800 per night</p>
      <p>★★★★☆ 255 reviews</p>
    </div>
  </div>
</div>

```

The markup includes the following code snippets:

- `<title>Townhome for Rent</title>` (points to the title)
- `<meta itemprop="priceCurrency" content="USD">` and `<meta itemprop="price" content="800">` (point to the price)
- `255` (points to the review count)
- `<meta itemprop="ratingValue" content="4.0">` (points to the rating)

JSON-LD markup code example

From [Schema Structured Data – SEO Guide by Raven](#) (General research):

```
<script type='application/ld+json'>
{
  "@context": "http://www.schema.org",
  "@type": "product",
  "brand": "Raven Tools",
  "name": "Site Auditor",
  "image": "https://raventools.com/img/og-raven.png",
  "description": "Site Auditor analyzes your site to find all of the SEO issues that may be keeping your site from ranking on search engines."
}
</script>
```

Google site and tools



1. guidance on using microdata
2. wizard to add microdata to a page
3. validate structured data on any web page to check that microdata is working
4. see what would appear in a SER

Plugins (1)



1. [WP SEO Structured Data Schema | WordPress Plugins](#) (6k) JSON-LD format; the plugin's developer provides five reasons why he thinks it's best-in-class
2. [Yoast SEO | WordPress Plugins](#) (1m) plugin is noteworthy because it enables semantic tagging not only for Schema.org but also Facebook, Twitter and Google+. Note that its Schema.org markup is both limited and a mix of formats.

Plugins (2)



3. [WPRichSnippets](#) (\$69/yr to \$399; Hesham Zebida) is an all-in-one plugin with a variety of options to build rich snippets; for review websites as well as product, organization, or restaurant
4. [Schema App Structured Data | WordPress Plugins](#) (5k) (see next slide)

Services example: *Schema App* (1)

[Schema App](#) service starts at \$15/month. 10 domains is \$37.



Schema App automates the creation and deployment of JSON-LD on any platform including WordPress for which it has a plugin, [Schema App Structured Data | WordPress Plugins](#) (5k).

By default, the plugin optimizes all your pages, posts, author pages and more using information that already exists on your WordPress website. The setup takes only a few minutes and then the optimization is done for you.


Services example: *Schema App* (2)

With Schema App, you create and manage all of your structured data in one place. You to pick from any itemtype and enter the data for it with the ability to export it to multiple formats including JSON-LD.

The service notifies you when Google changes recommendations and provides you the ability to update your markup in seconds.

By merging schema markup with Google Analytics, the service enables you to discover what markup competitors are using in order to adjust your own to outperform them.

Services example: *Schema App* (3)



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About 16,400,000 results (0.55 seconds)

Schema App

<https://www.schemaapp.com/> ▾
Structured Data made easy through automated JSON-LD creation, validation, and deployment, structured data analyzer, scalable **schema.org** solutions.

Schema App WordPress Plugin

The Schema App WordPress Plugin makes structured data on ...

Schema App Pricing

Schema App Pricing. Get 2 Months Free with a Yearly Subscription ...

Getting Started Guide

A Step by Step Guide for Optimizing your Website for ...

What is Schema App?

Schema App is a suite of tools that allows digital marketers to ...

[More results from schemaapp.com »](#)

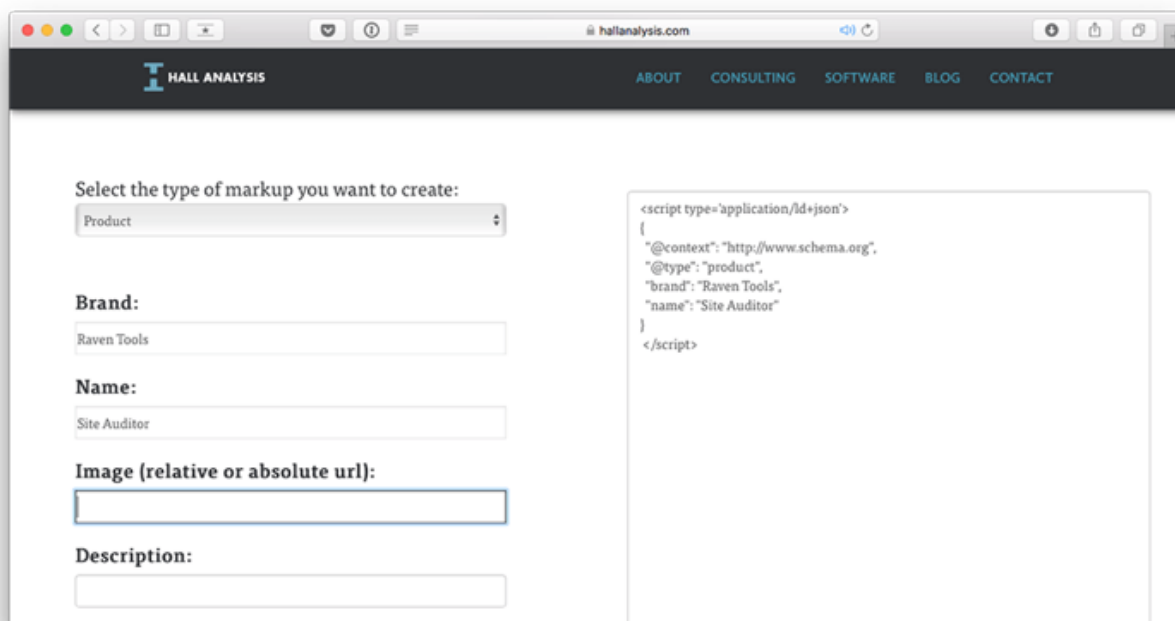
Schema App Structured Data — WordPress Plugins

<https://en-ca.wordpress.org/plugins/schema-app-structured-data-for-schemaorg/> ▾
★★★★★ Rating: 4.2 - 20 votes - Free

By default, the **Schema App** Plugin optimizes all your pages, posts, author pages and more using information that already exists on your WordPress website.

Generator example: *Hall Analysis*

JSON-LD Schema Generator For SEO - Hall Analysis LLC generates the correct JSON-LD for any page on your site.



The screenshot shows a web browser window with the URL `hallanalysis.com`. The page has a dark header with the logo and navigation links: ABOUT, CONSULTING, SOFTWARE, BLOG, CONTACT. The main content area is titled "Select the type of markup you want to create:" and features a dropdown menu set to "Product". Below this are input fields for "Brand:" (containing "Raven Tools"), "Name:" (containing "Site Auditor"), "Image (relative or absolute url):" (empty), and "Description:" (empty). To the right of these fields is a text area displaying the generated JSON-LD code:

```
<script type="application/ld+json">
{
  "@context": "http://www.schema.org",
  "@type": "product",
  "brand": "Raven Tools",
  "name": "Site Auditor"
}
</script>
```

Google's format preference

1. Google prefers microdata for web content (s: [Markup Helper](#))
JSON-LD is the recommended format where possible (s: [Introduction to Structured Data | Google Developers](#))
2. ... a summary of the format of structured data markup Google recommends for specific goals (s: [Structured Data Markup Formats: Microdata vs JSON-LD vs RDFa | Engage The Crowd](#) (2016-04-18))
3. Google is in the process of adding JSON-LD support for all markup-powered features
4. conclusion, JSON-LD

SEO value: the context (1)



1. 30% statistic from SearchEngineLand's 2011 post
2. contrary view from Searchmetrics research and analysis 2014
3. WP plugin developers and SEO practitioners say it improves SEO including ranking
4. while Google says that structured data isn't a direct ranking factor, it has also said that it may become one in the near future

SEO value: the context (2)

Schema.org & Genesis 2.0 | Yoast Dev Blog (Joost Yoast; 2013) excerpt:

Why implement Schema.org markup?

... Not just Google uses schema.org, all 4 major search engines, Google, Yahoo!, Bing and Yandex use it for several different purposes. ... So, in my opinion, schema.org markup is a must for everyone serious about their websites optimization.

SEO value: the context (3)

Webnodes, an enterprise ASP.NET CMS with integrated and dynamic Schema support, states on its home page:

Get more traffic from structured data markup (Semantic tags) proposed by Schema.org - the most important Search Engine Optimization (SEO) tool.

SEO value: conclusions (1)



1. higher CTRs generally means higher ranking
2. structured data has a very high correlation (i.e., indirect relationship) with search engine rankings
3. significant benefits for some schema types (e.g., products in e commerce)
4. conclusion, better presentation from structured data plus indirect effects but no direct ranking benefit

SEO value: conclusions (2)



5. bonus of faster and more consistent authoring
6. logical in that mere structure is not indicative of the content itself but rather a minor measure of its quality like spelling

Key takeaways



1. for the effort involved and value in use, this is a no-brainer
2. Google the mother ship for tools, resources (no surprise)
3. use Yoast SEO if you already have it and supplement as necessary

Extras

1. [The 20% of SEO That Creates 80% of The Results | Justin BrookeFollow](#)
2. [What Is Semantic Search and What Should You Do About It? | Moz](#)

While both recommend using structured data in the Microformats and Structure your data to help bots parse content sections, respectively, as a key element of the strategy recommended, I cite them for the strategies themselves.