



What Entities & Knowledge Graphs Mean for AI Search

Live Webinar



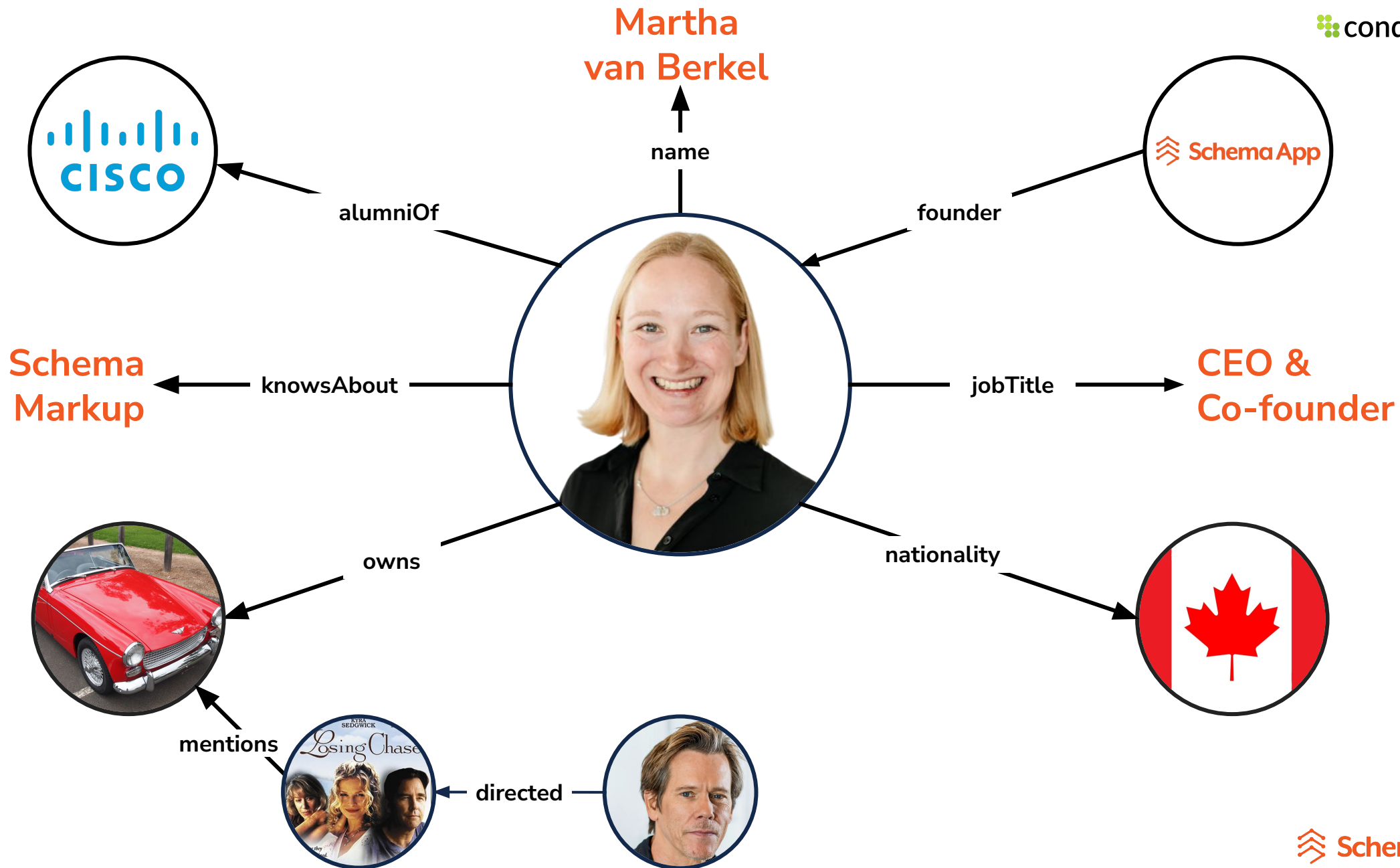
Patrick Reinhart

VP, Services & Thought Leadership
Conductor



Martha van Berkel

Co-founder & CEO
Schema App



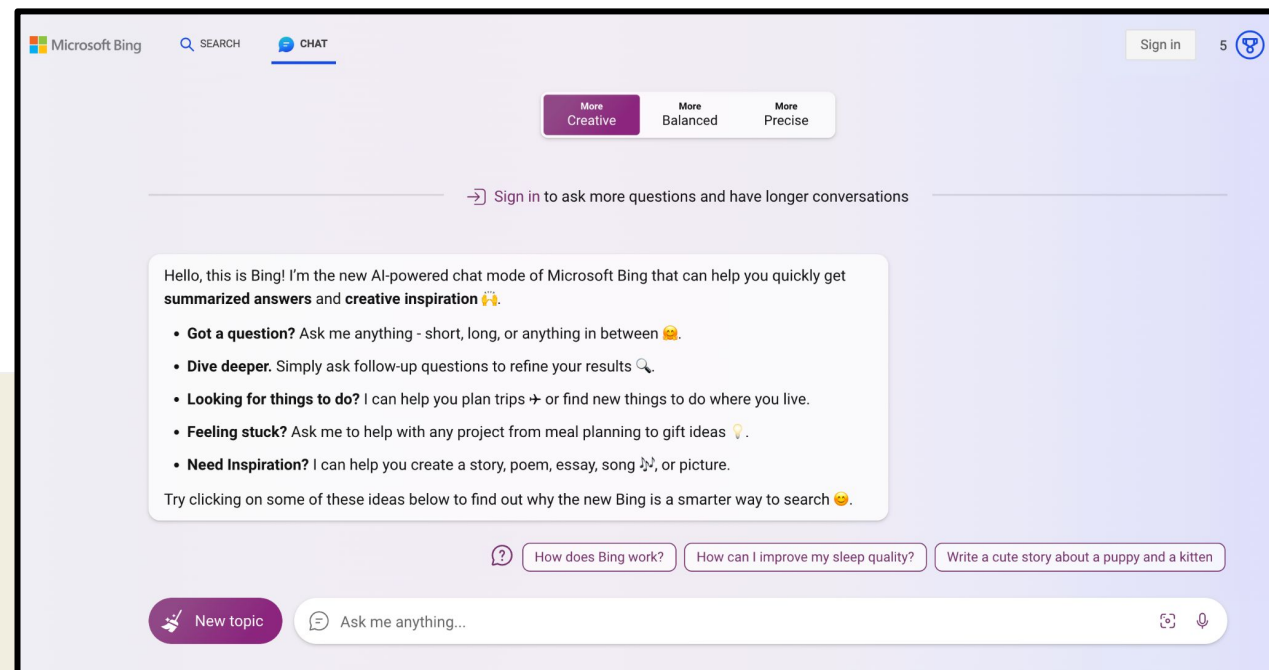
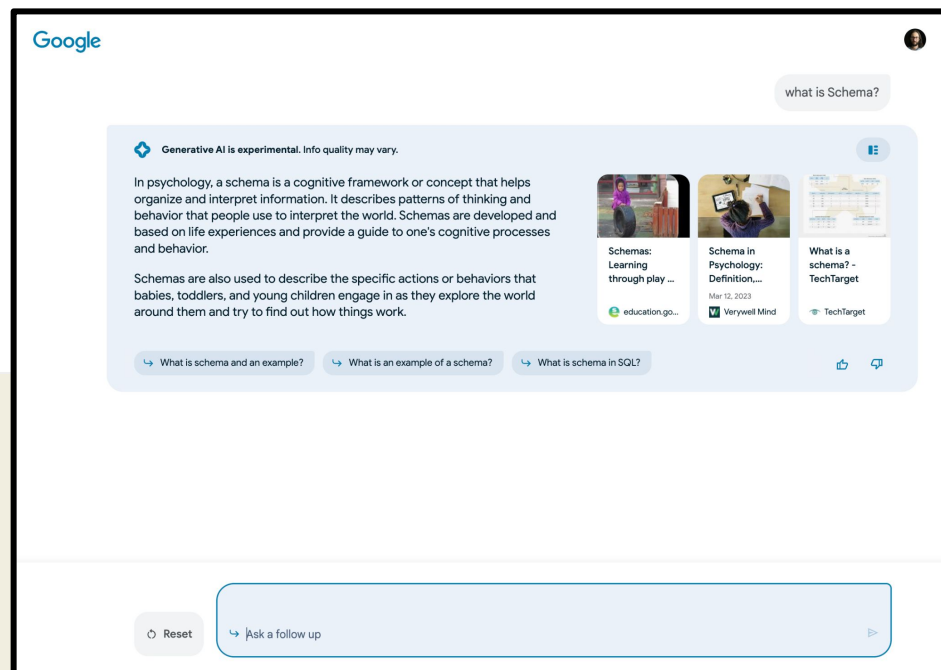
Schema App is a Scalable Knowledge Graph Solution for Enterprise SEO teams.

We are a semantic technology company that help organizations build their marketing knowledge graph with our Schema Markup solution to accelerate business results and stand out in search.

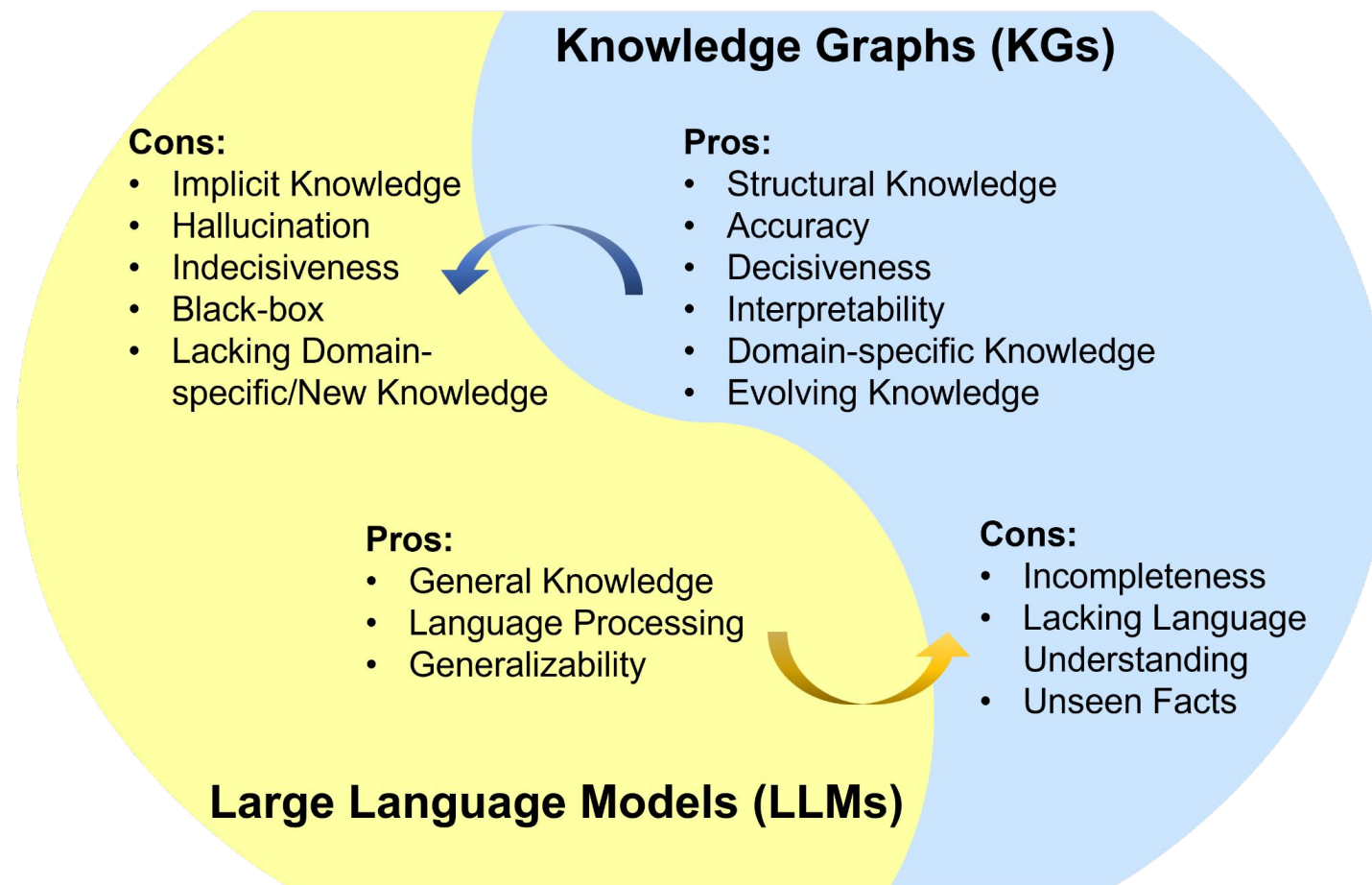
Trusted by Enterprises Worldwide



Context changing in SGE & the New Bing



Knowledge Graphs and LLMs work hand in hand



Source: [Unifying Large Language Models and Knowledge Graphs: A Roadmap](#)

 The Google logo is displayed in its characteristic multi-colored font (blue, red, yellow, green, red) within a white rectangular box on the left side of the slide.

“

It’s why we’ve been working on an intelligent model—in geek-speak, a “graph”—that understands real-world entities and their relationships to one another: **things, not strings.**”

– [Google](#) (2012)

What is a Knowledge Graph?

A collection of relationships between things defined using a standardized vocabulary, from which new knowledge can be gained through inferencing.

AI Systems in Google Search




RankBrain

- Understand how words relate to **concepts**
- Used to help rank or decide the best order for top search results

BERT

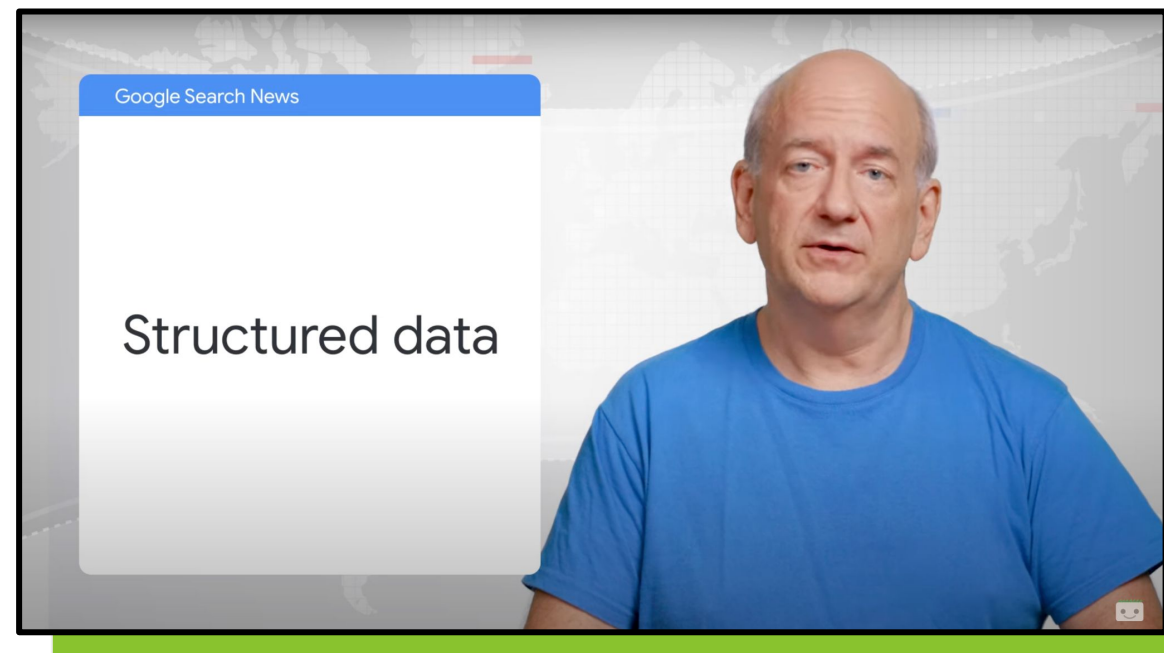
- Understand how combinations of words express different **meanings** and intent

Neural Matching

- Looks at an entire query or page rather than just keywords to understand the underlying **concepts**
- 

October 2023 Search Update from Google

- Structured Data is a “Machine readable code that search engines can use to **understand** the content”
- New Types will be introduced and some might go away
 - How-to rich results deprecated from the SERP
 - FAQ rich results only shown for well known, authoritative, government and health sites
- Use a solution that makes it easy to change your structured data and saves you time



[Ranking updates, structured data, and more! - Google Search News \(October '23\)](#)

**Schema Markup
to achieve
Rich Results**



**Schema Markup
to build a
Knowledge Graph**

Search has
moved from
strings to things

Lexical search → Semantic search

Keywords → Entities & Knowledge Graphs

What is an Entity?

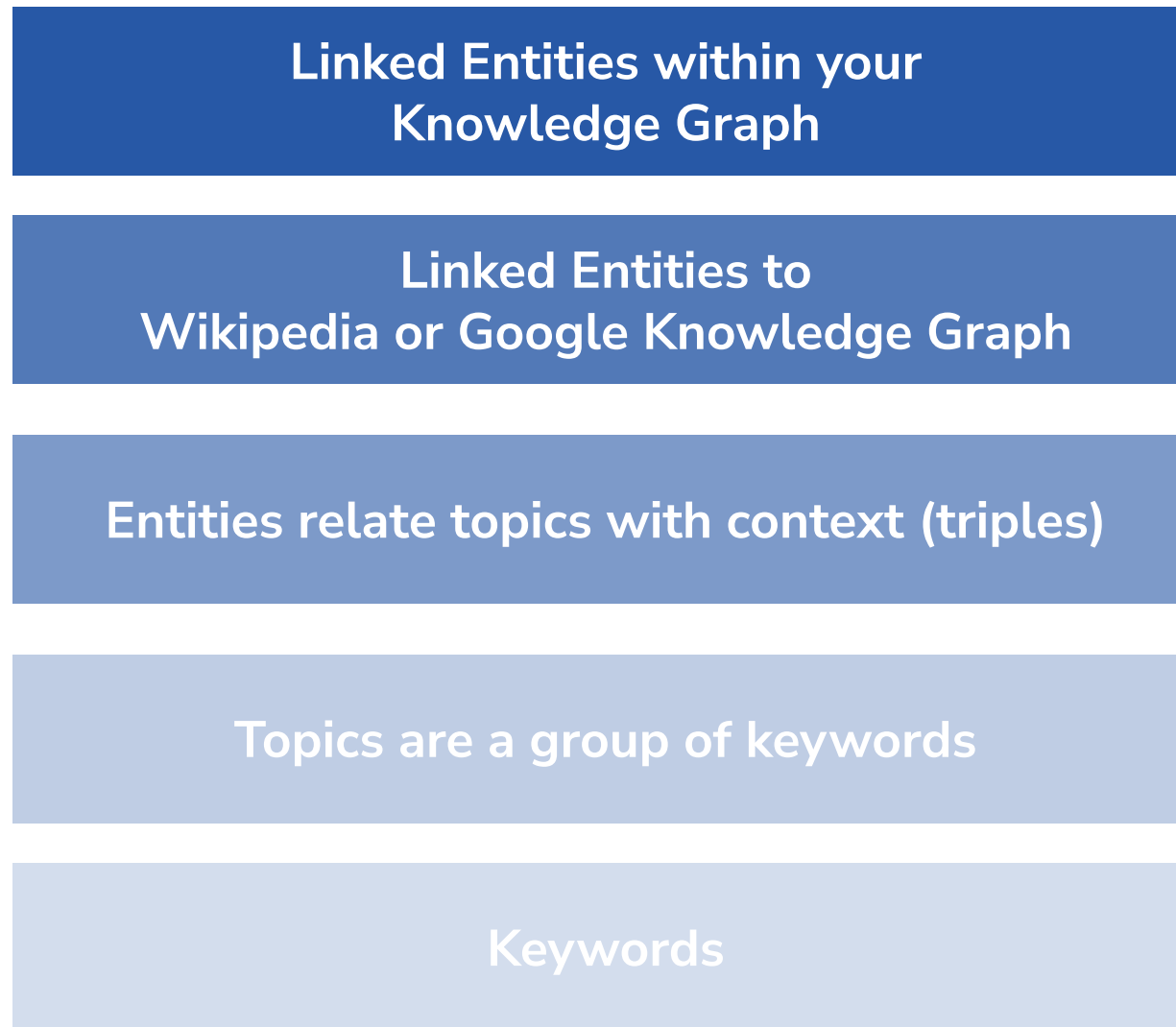
An entity is a thing with specific attributes.



Your Webpage = Entity Home

Schema Markup = Language to define Entities
on your website

Entity Maturity Scale



Entity Maturity

Help Google Understand Who Your Authors Are

The Person / Expert

Author

Questions Google Is Trying To Answer

Who Is This Person?

Why Are They An Expert In This Industry?

Why Are They An Expert On This Topic?

How You Can Help Answer Those Questions

Create An Author Page

Link To LinkedIn Profile

Link To / From Wikipedia

Link To Other Articles & Publications

Author Schema

Home → Leadership → Patrick Reinhart

Breadcrumb Establishing Position At Company

Decent Headshot (right? right?)



Patrick Reinhart

VP, Services and Thought Leadership

Name & Title Clearly Stated

Patrick Reinhart leads enterprise digital strategy for Conductor's team as Vice President of Services and Thought Leadership. He helps the largest brands in the world with their organic search initiatives.

Patrick brings over 15 years of organic search and digital marketing experience to his work. Before joining Conductor, Patrick led the U.S. organic search practice at New York-based agency Prime Visibility.

Prior to his agency and technology experience, Patrick was an accomplished entrepreneur, founding an eCommerce appliance retailer and a music company.

Additional Articles From The Author

Link To LinkedIn Profile



More from Patrick



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Read now



Future-Proofing Your Marketing Efforts Through Digital Transformation

Read now



The Top SEO Trends of 2022

Read now



Conductor to Hold Second Annual Digital Transformation Summit to Showcase Exclusive...

Read now

What is Semantics?

Semantics is a term for the study of language, how it expresses meaning, and the rules it must abide by in order to convey this meaning.

**Do search engines
care about semantic
Schema Markup?**

In short, yes.

 Google

Also, over time richer/correct semantics will favour more connected graphs.”

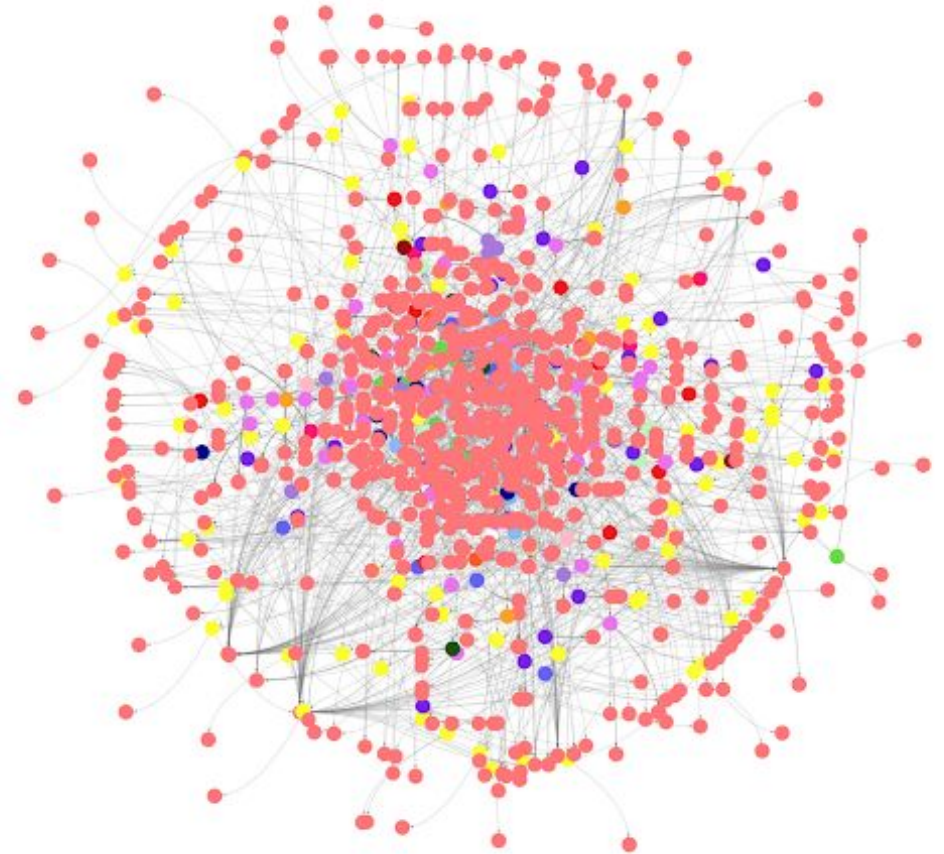
– Ryan Levering, Google (Source: Mastodon)

 Bing

Write great content annotated with schema markup... use Semantic Markup to convey information about the page.”

– Fabrice Canel, Bing (Source: Pubcon Austin 2023)

Schema Markup builds Marketing Knowledge Graphs



Why should you implement Semantic Schema Markup?



Develop your knowledge graph by connecting the various entities to your organization

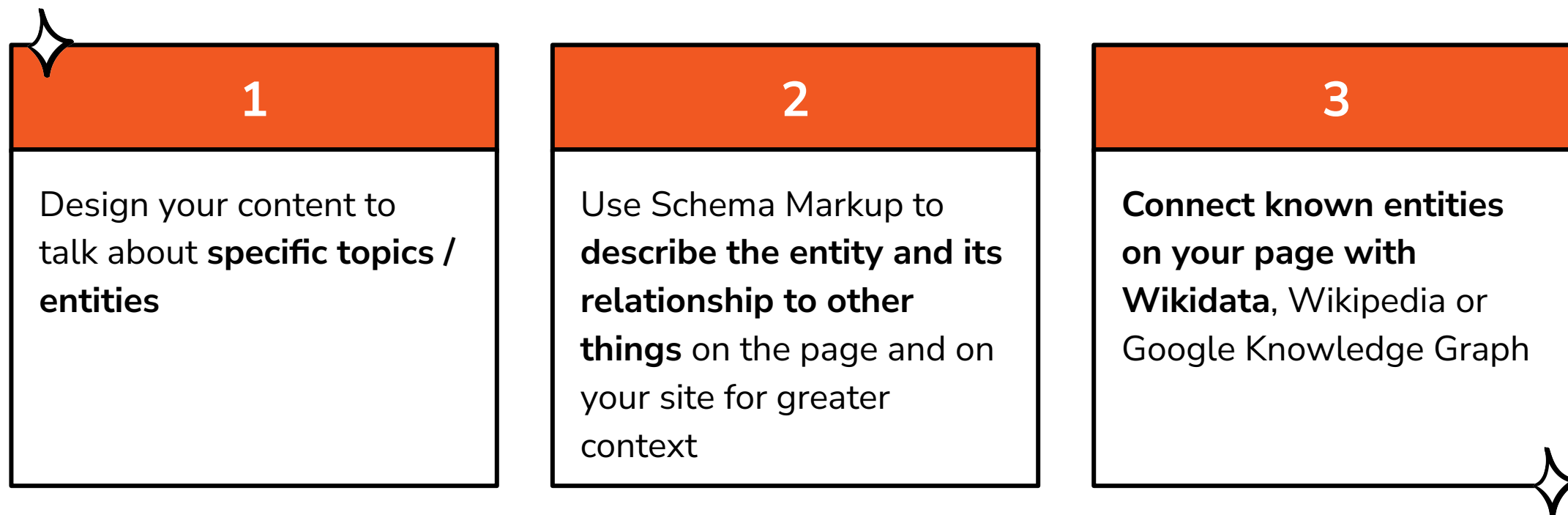


Help AI search engines understand and contextualize your content to provide searchers with more relevant results

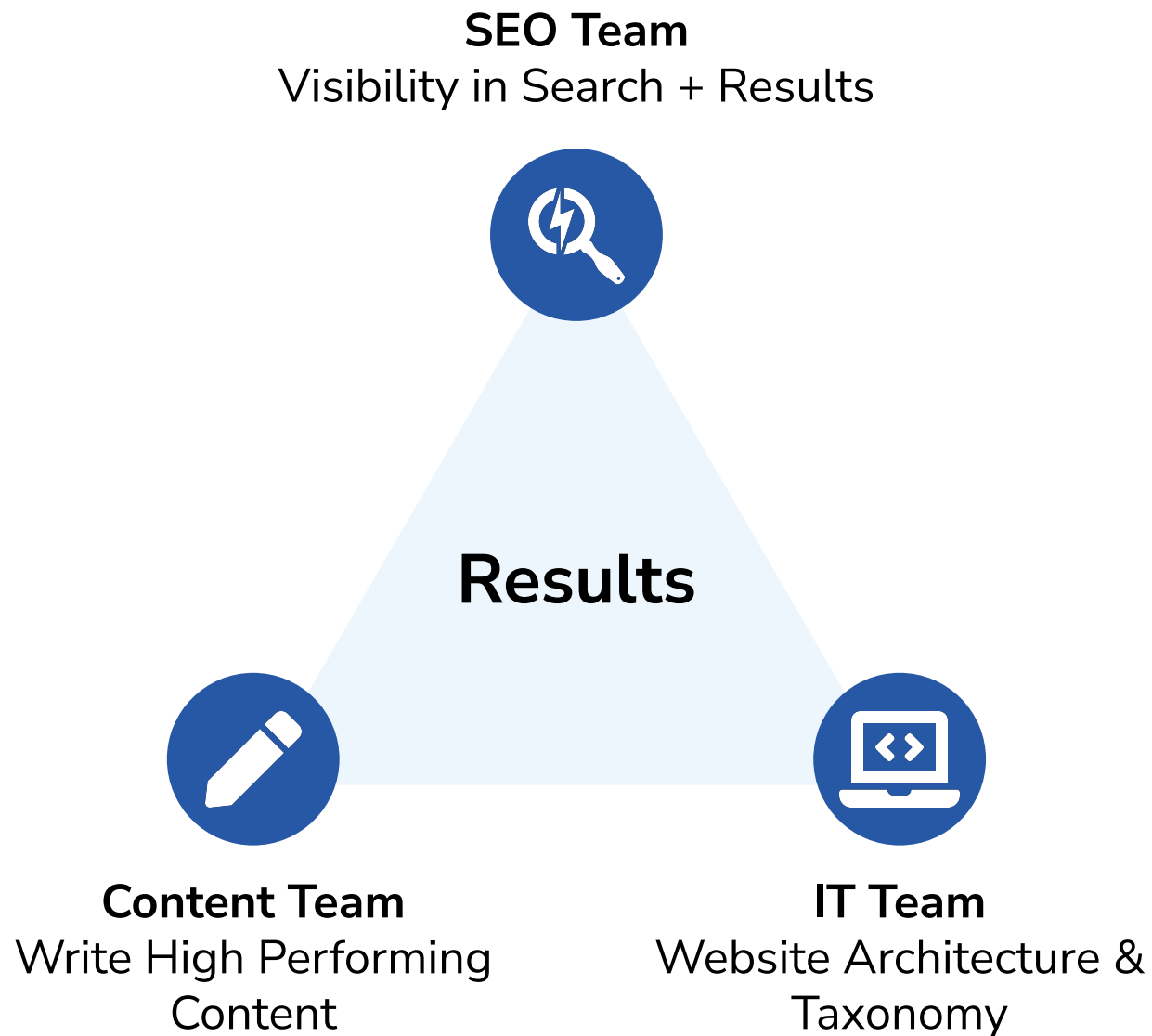


Train AI search engines to provide more accurate results by grounding the LLM with your knowledge graph

How to make your entities connected within your brand knowledge graph



Schema Markup is a team sport





PROBLEM:

NOT EVERYONE KNOWS THEY'RE ON THE TEAM

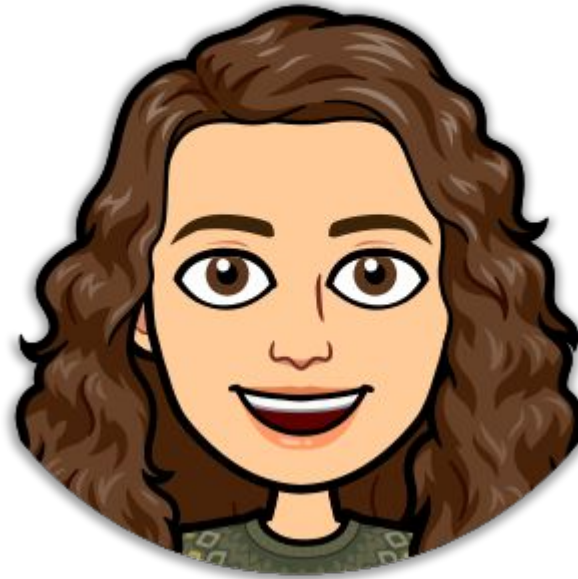
SEO



Content Ideas /
Optimizations

Technical Fixes

CONTENT



Content Creation /
Updates

WEB



Implementation





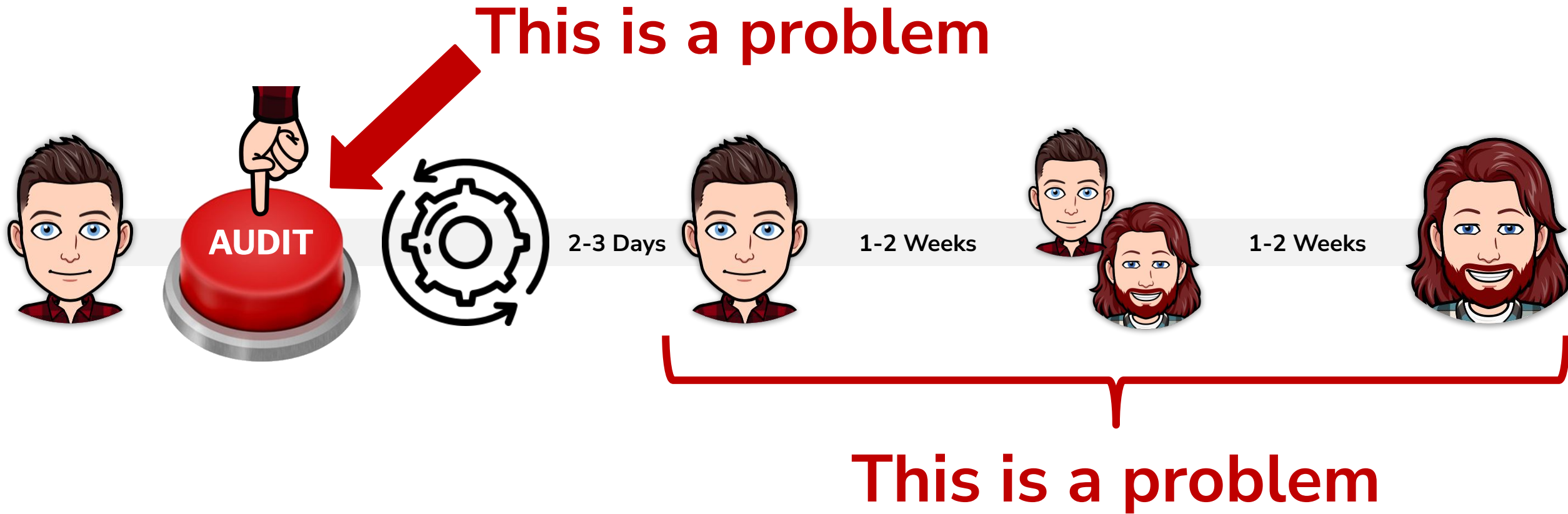
It's Time To Adopt An “Always On” Mentality

The best SEO programs in the world are “always on” and somewhat mechanical. When SEO is part of everyone’s job, more gets done more often.

This is a problem

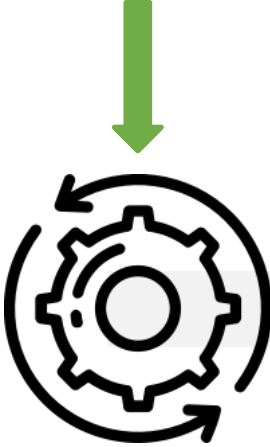


How Most Companies Run Technical Site Audits



How Companies That Are “Always On” Run Technical Site Audits

Technology Is Always Running



Always On



Real-Time Alerting



Monthly Meeting w/ SEO Team

Preset Alerts Based On What
You Want To Look Out For



Alerts Go Directly To The Web
Team & Are Fixed

1. Design your content to talk about specific topics / entities

Team: SEO + Content

Focus on one topic per page

- Provide search engines with clarity on what the page is mainly about . Be specific.
- Build pages in a scalable manner
 - Re-use the page architecture across page sets.
 - Example Topic Groups: Products, Services, Case studies, Events, People, Jobs

Sponsored



Green Chef

<https://www.greenchef.com>

Green Chef® - Get 60% Off - Plus 20% Off For 2 Months

Kickoff Your Clean Eating Routine With Green Chef. Get 60% Off + 20% Off For 2 Months Now.



Generative AI is experimental. Info quality may vary.

Here are some meal kit delivery services similar to Fresh Plate:

- HelloFresh: Offers a diverse menu and easy-to-follow instructions.
- Chefs Plate: Provides good value.



Hello Fresh vs Good...

Chefs Plate, for instance, provides the best value....

mealkitscanada.ca



Google Is Getting Very Specific



Hello Fresh vs



What is the best



Top EveryPlate

Alternatives for Affordable Me...

Oct 31, 2022

[Top10.com](https://top10.com)

- Freshly: Uses fresh ingredients and caters to busy professionals.
- Green Chef: Uses certified organic ingredients.
- Marley Spoon: Offers simple, home-cooked meals.
- Purple Carrot: Provides plant-based meals.
- EveryPlate: Offers a lower-cost alternative to HelloFresh.

Other meal kit delivery services include: Dinnerly, Home Chef, Sunbasket.

Ask a follow up

Is EveryPlate the same as HelloFresh?

What is the difference between HelloFresh and Chefs plate?

Who



My Subscription Addiction

<https://www.mysubscriptionaddiction.com>

EveryPlate vs. HelloFresh — Which One's Right for Me?

(EveryPlate is actually owned by HelloFresh and was launched in 2018 as a lower-cost alternative.) On the surface, they're a lot alike. Both send recipes plus ...

[The Food](#) · [The Menu & Meal Plans](#) · [Dietary Restrictions](#)

HelloFresh vs. Goodfood vs. Chefs Plate Comparison (2023)

Passages Are Highlighted

Canada's most distinguished [meal kit delivery services](#) are Goodfood, HelloFresh, and Chef's Plate. All the companies put an emphasis on quality and freshness. There are also a variety of dishes and delicious dinner options on the menus, but who has the most, and who's the cheapest?

Chefs Plate is a subsidiary of HelloFresh; however, the two companies differ on several levels. Chefs Plate, for instance, provides the best value. HelloFresh offers the most variety on its menu so is good for families with fussy eaters or for people who like to try new dishes and cuisines. Goodfood has the fastest recipes around, with some starting at just 10 minutes, although Chefs Plate also has a fast recipe option.

Examine the content below to compare Canada's three top leading meal kit services. We discuss every aspect of these three meal kit companies, from their intriguing weekly meals to places where free shipping is available (and which of the companies even offers this), to customer reviews. We also have some discount codes for you to enjoy along the way so stick with us.



goodfood



Specificity Will Be Key Moving Forward

The image shows a screenshot of the FreshPlate AI writing assistant interface. The browser address bar shows 'freshplate.com'. The page title is 'freshplate.com/meal-delivery-service'. The main content area shows a blog post titled 'Best Healthy Meal Delivery For Families' with a sub-heading 'Perfectly Portioned Recipes For Two To Four People'. The AI assistant has generated two sections of text, each with a 'Load more questions' link and a 'Body Copy Suggestions' section.

Questions to Answer

Answer some of the questions people are asking about this topic. Answering these questions may help you rank in People Also Ask results for related queries.

- Do you really save money on meal delivery?
- What is better than HelloFresh?
- How much does Ilana meals cost?
- Is HelloFresh for weight loss?

What is similar to fresh plate?

The content provides an extensive list of healthy meal delivery services, but does not specifically mention any service similar to fresh plate directly. To improve, it could compare and contrast similar diet-specific meal delivery services with fresh plate focusing on factors like food quality, price, and customization.

[Load more questions](#)

Body Copy Suggestions

Questions to Answer powered by AI

Answer some of the questions people are asking about this topic. Answering these questions may help you rank in People Also Ask results for related queries.

Is fresh plate for weight loss?

The content provides a list of healthy meal delivery services, but does not directly address if fresh plate is specifically designed for weight loss. However, it highlights numerous services that cater to various dietary preferences and needs, which indicates that such meal delivery services, including fresh plate, can aid in weight loss by offering healthier options.


What is similar to fresh plate?

The content provides an extensive list of healthy meal delivery services, but does not specifically mention any service similar to fresh plate directly. To improve, it could compare and contrast similar diet-specific meal delivery services with fresh plate focusing on factors like food quality, price, and customization.

[Load more questions](#)

Body Copy Suggestions

Example



[Solution](#) [How It Works](#) [Pricing](#) [Industries](#) [Case Studies](#) [Resources](#) [Contact](#)

Solution / Schema App Highlighter

Deploy and manage your Schema Markup at scale without the complexity

Use the Schema App Highlighter to customize your Schema Markup and deploy to thousands of similar templated pages on your website in minutes.

[Book a Demo](#)

★★★★★ 4.9 (210)

Schema App Highlighter Features

- Generates dynamic Schema Markup for similar pagesets
- Deploys Schema Markup to thousands of pages within minutes
- Validates JSON-LD Schema Markup with Google's Rich Results Testing Tool Structured Data Testing or Schema Markup Validation Tool in one click
- Automatically links to known entities in Wikipedia and Wikidata to provide greater clarity
- Provides real-time validations showing user errors and warnings while creating markup
- Integrates and deploys Schema Markup to any CMS or website

Benefits

- ✓ Manage markup at scale with ease and accuracy
- ✓ Support from Schema Markup experts
- ✓ Ability to target any rich result
- ✓ Built in semantic technology to develop knowledge graph
- ✓ Provide SEO teams with agility
- ✓ Reduced dependency on IT

2. Leverage Schema.org properties to describe entity

Team: SEO + Content + IT

Schema.org
Docs Schemas Validate About

🔍

Product

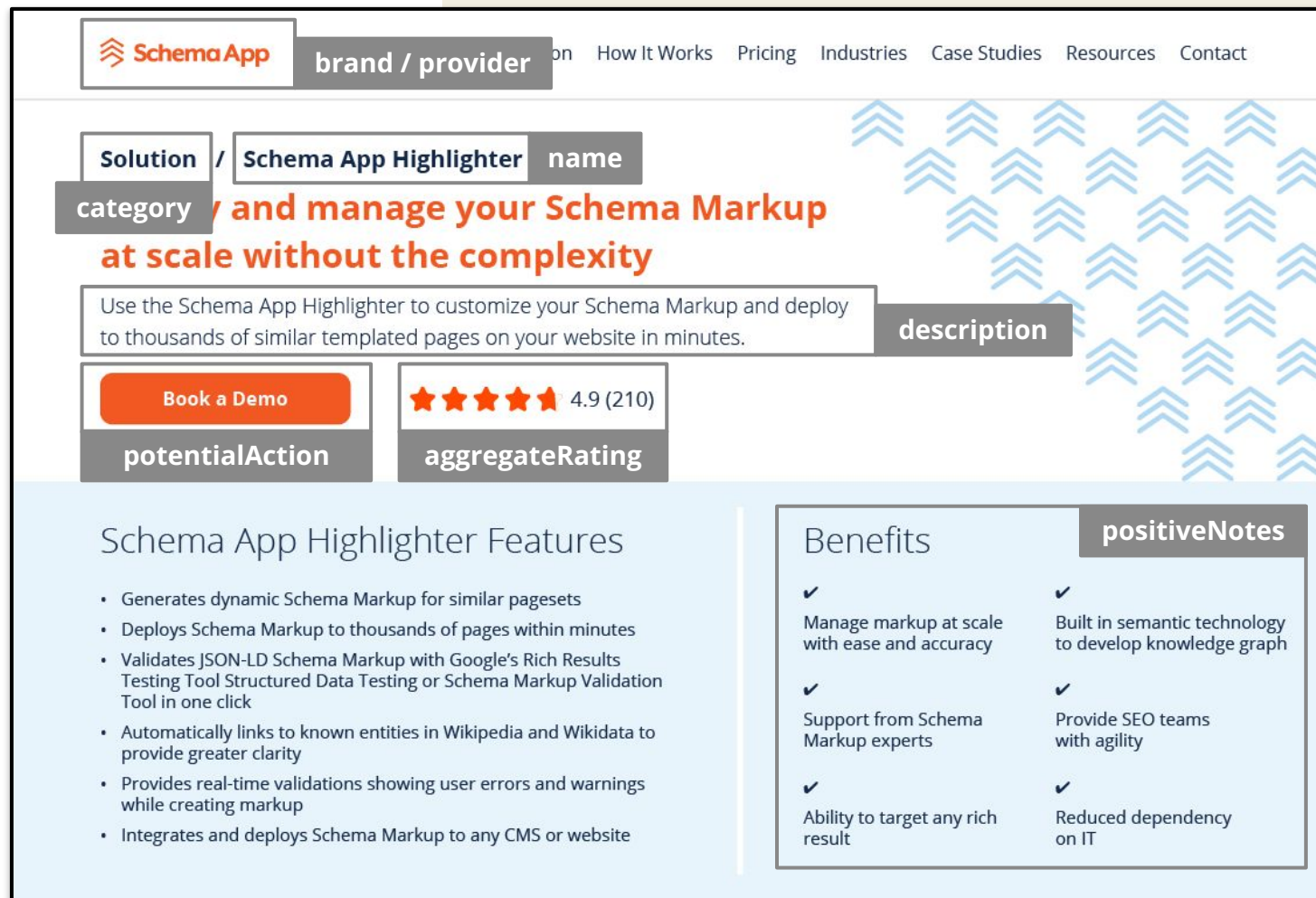
A Schema.org Type

Thing > Product [more...]

Any offered product or service. For example: a pair of shoes; a concert ticket; the rental of a car; a haircut; or an episode of a TV show streamed online.

Property	Expected Type	Description
Properties from Product		
additionalProperty	PropertyValue	A property-value pair representing an additional characteristic of the entity, e.g. a product feature or another characteristic for which there is no matching property in schema.org. Note: Publishers should be aware that applications designed to use specific schema.org properties (e.g. https://schema.org/width , https://schema.org/color , https://schema.org/gtin13 , ...) will typically expect such data to be provided using those properties, rather than using the generic property/value mechanism.
aggregateRating	AggregateRating	The overall rating, based on a collection of reviews or ratings, of the item.
asin	Text or URL	An Amazon Standard Identification Number (ASIN) is a 10-character alphanumeric unique identifier assigned by Amazon.com and its partners for product identification within the Amazon organization (summary from Wikipedia's article). Note also that this is a definition for how to include ASINs in Schema.org data, and not a definition of ASINs in general - see documentation from Amazon for authoritative details. ASINs are most commonly encoded as text strings, but the [asin] property supports URL/URI as potential values too.
audience	Audience	An intended audience, i.e. a group for whom something was created. Supersedes serviceAudience .
award	Text	An award won by or for this item. Supersedes awards .
brand	Brand or Organization	The brand(s) associated with a product or service, or the brand(s) maintained by an organization or business person.
category	CategoryCode or PhysicalActivityCategory or Text or Thing or URL	A category for the item. Greater signs or slashes can be used to informally indicate a category hierarchy.
color	Text	The color of the product.

Use Properties to describe the Product entity and its relationship to other entities on the page/the website



The screenshot shows the Schema App product page with several annotations for schema extraction:

- brand / provider**: Points to the Schema App logo in the top navigation bar.
- Solution / Schema App Highlighter name**: Points to the product name in the main header.
- category / and manage your Schema Markup at scale without the complexity**: Points to the main headline.
- description**: Points to the sub-headline: "Use the Schema App Highlighter to customize your Schema Markup and deploy to thousands of similar templated pages on your website in minutes."
- potentialAction**: Points to the "Book a Demo" button.
- aggregateRating**: Points to the 4.9 (210) star rating.
- positiveNotes**: Points to the "Benefits" section, which lists:
 - Manage markup at scale with ease and accuracy
 - Built in semantic technology to develop knowledge graph
 - Support from Schema Markup experts
 - Provide SEO teams with agility
 - Ability to target any rich result
 - Reduced dependency on IT

3. Connect entities on a page to other entities within your organization / website

Team: SEO

```
@type: Product
  @id
  url
  name
  description
  brand
    @type: Organization
      name: Schema App
      @id: https://www.schemaapp.com/#Organization
      url: https://www.schemaapp.com/
      description: Use the Schema App Highlighter to...
      sameAs: https://twitter.com/schemaapptool
      sameAs: https://www.linkedin.com/schema-app/
      areaServed: http://www.wikidata.org/entity/Q13780930
      telephone: +18554448624
      email: support@schemaapp.com
  aggregateRating
  positiveNotes
  category
```

Nesting links to external authoritative knowledge bases

Team: SEO

@type: Product

@id

url

name

description

brand

aggregateRating

positiveNotes

category

@type: Thing

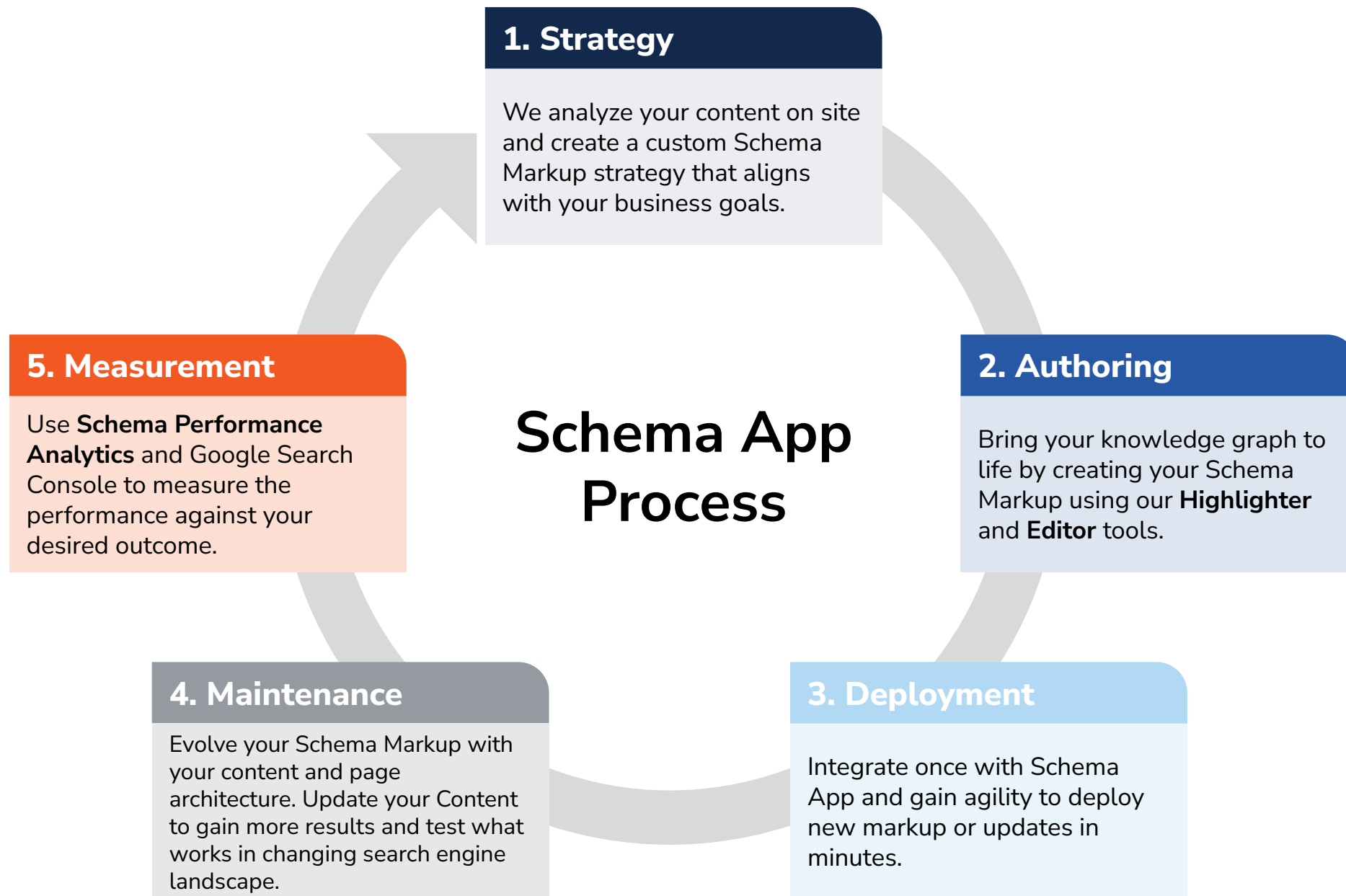
name: Solution

sameAs: <https://www.wikidata.org/wiki/Q21075690>

Connect the primary entity on a page to the relevant rich result

Team: SEO + Content

```
@type: Product
  @id
  url
  name
  description
  brand
  aggregateRating
    @type: AggregateRating
    @id: https://www.schemaapp.com/solutions/schema-app-highlighter
      #Product_aggregateRating_AggregateRating
    bestRating: 5
    ratingValue: 4.9
    reviewCount: 210
    worstRating: 1
  positiveNotes
  category
```

New Measures for AI Search



Structured data helps search engines understand content.

Metric:

- Click-through rate

CTR increases with more qualified traffic.



Introduce Agility Into Your Team.

Metric:

- Time to Update/Value
- Reduced IT Dependency

Move quickly with content updates and have your structured data dynamically update to show new context.



The future of search requires more than keywords. It requires a knowledge graph.

Metric:

- Schema Markup coverage
- Health of Knowledge Graph

Schema App creates knowledge graphs. You own the data and can reuse it for AI.

**Create a
Knowledge Graph
with Schema
Markup**



**Search Engines
Understand Content
& Provide More
Quality Traffic**



Thank You