

Designing Content for Humans and Machines

Strategies for Healthcare in the Age of AI



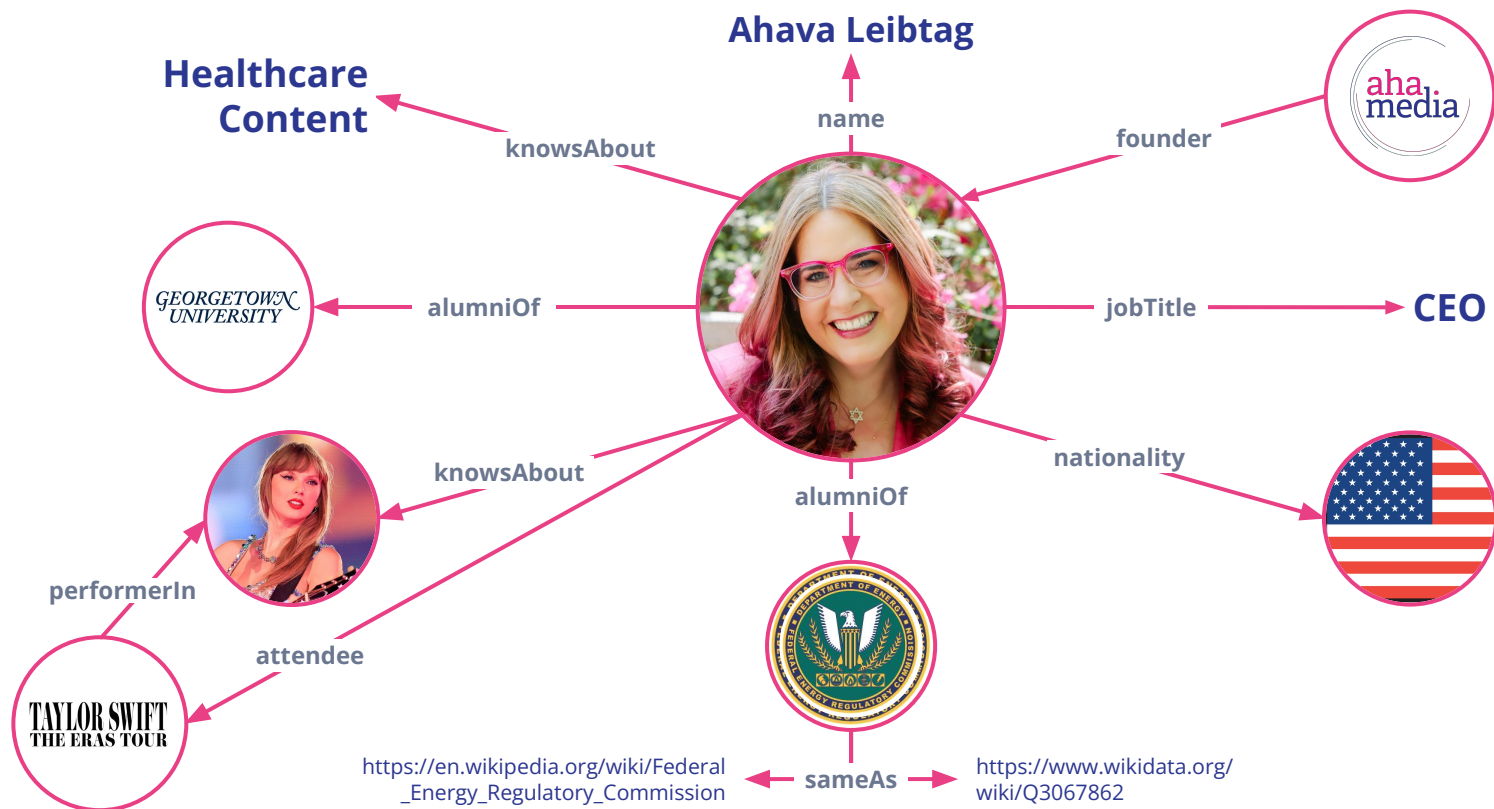
Agenda

- Introductions
- Consumer Search Behaviours
- Optimizing Content for Humans and Machines
 - Structure
 - Context
- Agentic Web

Martha van Berkel's Knowledge Graph



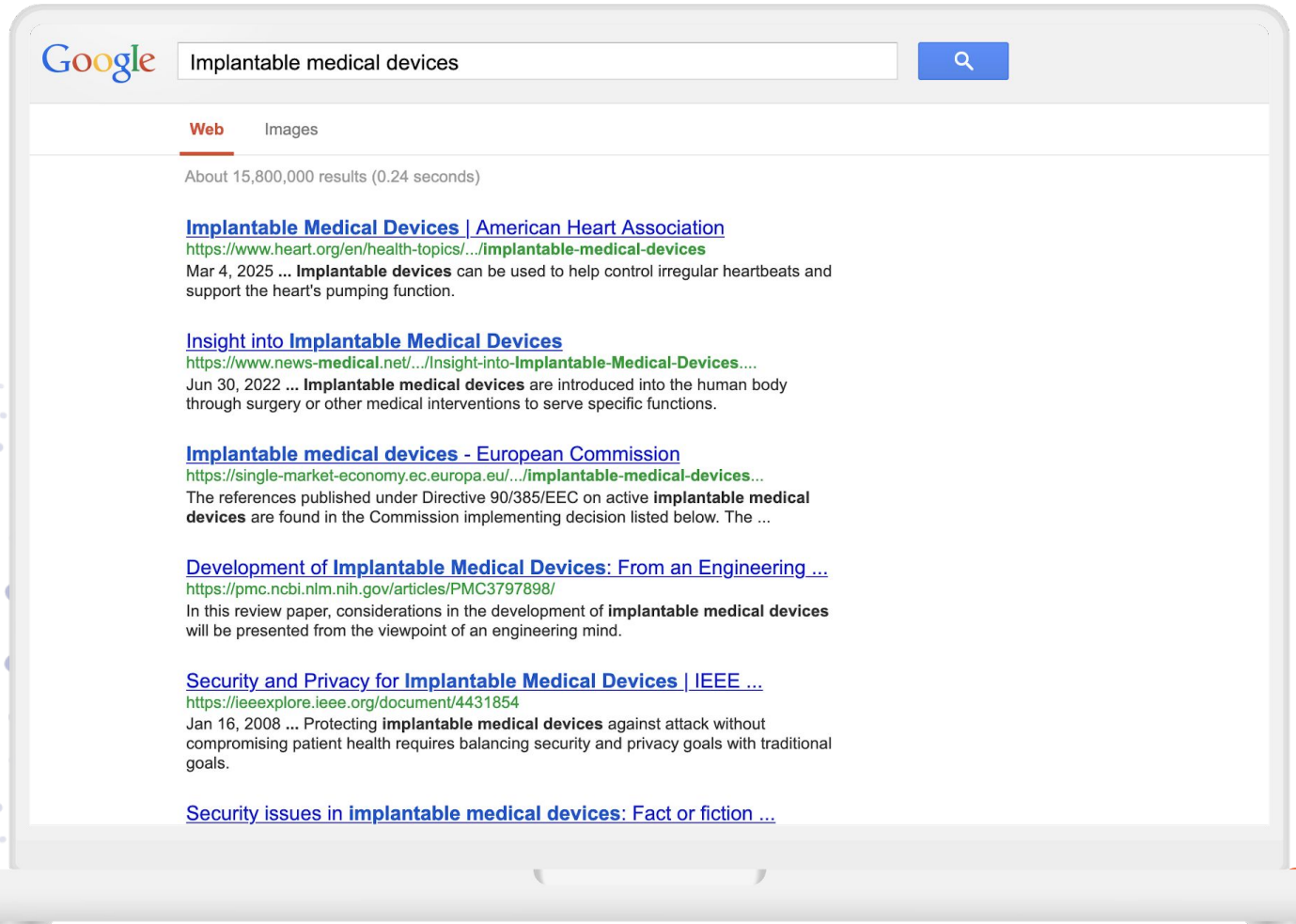
Ahava Leibtag's Knowledge Graph



Search is changing

Google Search

2019



Google Search

2025



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 AI Overview

Learn more

Implantable medical devices (IMDs) are surgically inserted devices that remain in the body for an extended period to treat or manage health conditions.

Types of IMDs:

Joint replacements:
Artificial joints, such as hip or knee replacements, restore mobility and reduce pain in damaged joints.

Cardiac implants:

Show more

The list of implantable medical devices most commonly used includes artificial joints, breast implants, contraceptive Intra-Uterine Devices (IUDs), and bone, muscle, and joint fusion hardware.

 Vantage Medtech
<https://vantage-medtech.com/what-are-implantable-me...>

What are Implantable Medical Devices? - Vantage Medtech

What are Implantable Medical Devices? - Vantage Medtech

This, combined with a scarcity of organ donors all over the world, increases the demand. And the U.S. Food and Drug...

ISO 13485:2016 - How to manage implantable medical devices

Jul 4, 2017 — Devices that interact with the human body but do not stay in it are referred to as non-implantable medical...

Global Active Implantable Medical Devices Market Revenue

By Region - 2023-2030 (Mn)



North America 4,888.1
Europe 1,847.1
Asia Pacific 1,847.1
Latin America 1,847.1
Middle East and Africa 1,847.1
CAGR 4.4%

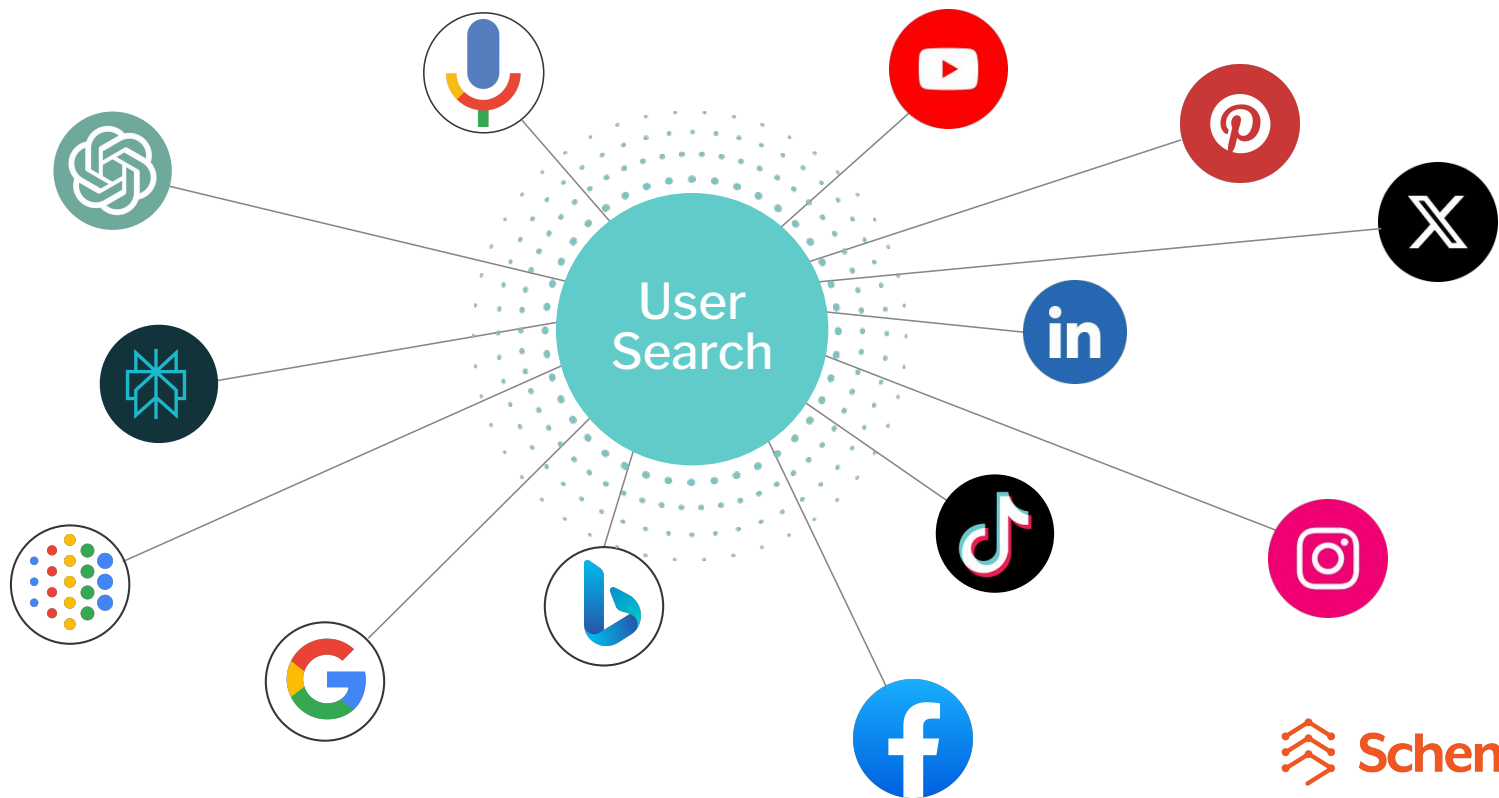


People also ask

What are examples of implantable devices?

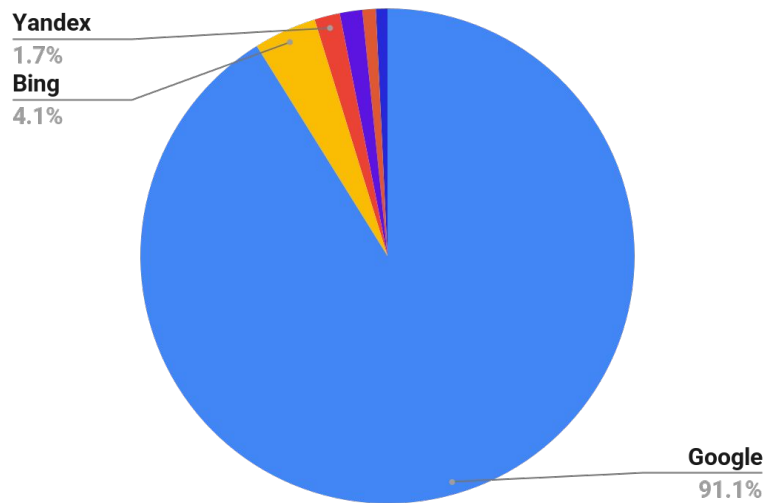
Implant
Medicine

Everything, everywhere, all at once.
Search is now starting in multiple places.



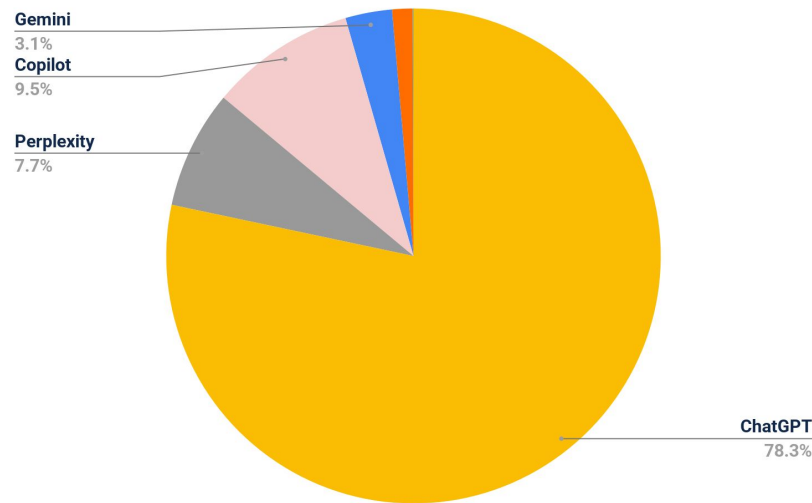
Google & ChatGPT are dominating the search space

Search Engine Worldwide Market Share



Source: statcounter, Sept 2025 – [Search Engine Market Share Worldwide | Statcounter Global Stats](#)

AI Chatbot US Market Share



Source: statcounter, Sept 2025 – [AI Chatbot Market Share Worldwide | Statcounter Global Stats](#)



What can I help with?

I am looking for a doctor who can help me with my **Lyme Disease**. I am located in **Manhattan** and only have time on Thursdays between 1-3 to attend an appointment. I have **UnitedHealth Group insurance**. Where can I go for my initial appointment that is within 5 miles?



What should you consider
when writing content?

Structure

- **Write in components, not pages.** Break content into reusable elements (headline, intro, CTA, quote, etc.) to make it flexible and scalable.
- **Be consistent with patterns and metadata.** Use the same structure, terminology, and tagging so AI and search engines can recognize relationships.
- **Plan for both humans and machines.** Write naturally for readers, but organize information so it's easy for technology to parse and reuse.
- **Design for reuse and recombination.** Structured content can appear across channels (web, chatbot, AI summary) without rewriting.

**Ensure your Schema Markup
clearly describes the content on
your entire site** to optimize for AI
understanding



Schema Markup (aka Structured Data) is Data for AI



```
<script type="application/ld+json">
{
  "@context": "http://schema.org",
  "@type": "Organization",
  "@id": "https://www.schemaapp.com/#Organization",
  "url": "https://www.schemaapp.com/",
  "name": "Schema App",
  "legalName": "Hunch Manifest Inc",
  "description": "Schema App is an end-to-end schema markup solution",
  "telephone": "+18554448624",
  "knowsLanguage": "http://www.wikidata.org/entity/Q1860",
  "areaServed": "http://www.wikidata.org/entity/Q13780930",
  "email": "support@schemaapp.com",
  "sameAs": [
    "https://www.linkedin.com/company/2480720/",
    "https://twitter.com/schemaapptool",
    "https://www.youtube.com/channel/@SchemaApp"
  ],
  "address": {
    "@type": "PostalAddress",
    "@id": "https://www.schemaapp.com/#PostalAddress",
    "name": "Schema App Address",
    "streetAddress": "201 - 412 Laird Road",
    "postalCode": "N1G 3X7",
    "addressRegion": "Ontario",
    "addressLocality": "Guelph",
    "addressCountry": "Canada"
  }
}
</script>
```

Context

- **Context gives content meaning.** Schema markup tells machines *what* your content is about and *how* it connects to other concepts (e.g., doctor → hospital → specialty).
- **Good writing supports good schema markup.** Clear, structured, and consistent language makes it easier for AI and search engines to interpret your content correctly.
- **Schema markup amplifies discoverability.** Adding context through schema helps your content appear in rich results, AI summaries, and voice search.
- **Think semantically, not just syntactically.** Write with intent and clarity so both humans and machines understand the *why* behind the words.

Example

Syntactic writing (flat, unclear for machines)

"Learn more about our care options."

- To a human, that's fine — but to a machine, there's no context.
- Care options could mean anything: medical services, home care, therapy, etc.

Semantic (clear, contextual writing)

"Learn more about our cardiology services and how our heart specialists care for patients with coronary artery disease."

Now both humans and machines understand the:

- Subject matter (cardiology)
- Entities (services, specialists)
- Relationships (who does what, for whom)

**Define and connect entities
within your Schema Markup** to
communicate context and topical
authority



Schema Markup = Language to *define*
Entities on your website

External Entity Linking

Identify the entities mentioned in your content and **connect them to corresponding entities** on the web.

Daniel Leon Bedney, MD

★★★★★ 4.9 (53)

Family Medicine, Sports Medicine

AdventHealth Medical Group

Offers Video Visits

Accepts New Patients

[Download Contact Information](#)

Locations Expertise Insurances Reviews and Comments

Locations

Winter Park

AdventHealth Medical Group Family Medicine at Winter Park

Suite 200
Winter Park, FL 32792

407-646-7070

Map showing Winter Park location at 133 Benmore Drive, Suite 200, Winter Park, FL 32792.

```
"mentions": {
  "@type": "Place",
  "name": "Winter Park",
  "sameAs": "https://en.wikipedia.org/wiki/Winter_Park,_Florida",
  "sameAs": "https://www.wikidata.org/wiki/Q986641"
}
```

Internal Entity Linking

Identify the entities defined on your website and defining the relationships between them.

The screenshot shows a doctor's profile for Daniel Leon Bedney, MD, and a location for AdventHealth Medical Group Family Medicine at Winter Park. An orange box highlights the doctor's name, and an orange arrow points from it to a JSON-LD snippet. The snippet defines the doctor as a 'Physician' with a specific name and a URL to his profile. Below this, the 'Locations' section lists the Winter Park office with its address and phone number. A map on the right shows the location of the office at the intersection of Mizell Ave and Stokely Ave.

Daniel Leon Bedney, MD

★★★★★ 4.9 (53)

Family Medicine, Sports Medicine

AdventHealth Medical Group

Offers Video Visits

```
"@type": "Physician",  
"name": "Daniel Leon Bedney, MD",  
"@id":  
"https://www.adventhealth.com/find-doctor/doctor/daniel-leon-bedney-md-1831529890#Physician",
```

Locations

Winter Park

AdventHealth Medical Group Family Medicine at Winter Park

133 Benmore Drive
Suite 200
Winter Park, FL 32792

407-646-7070

Winter Park

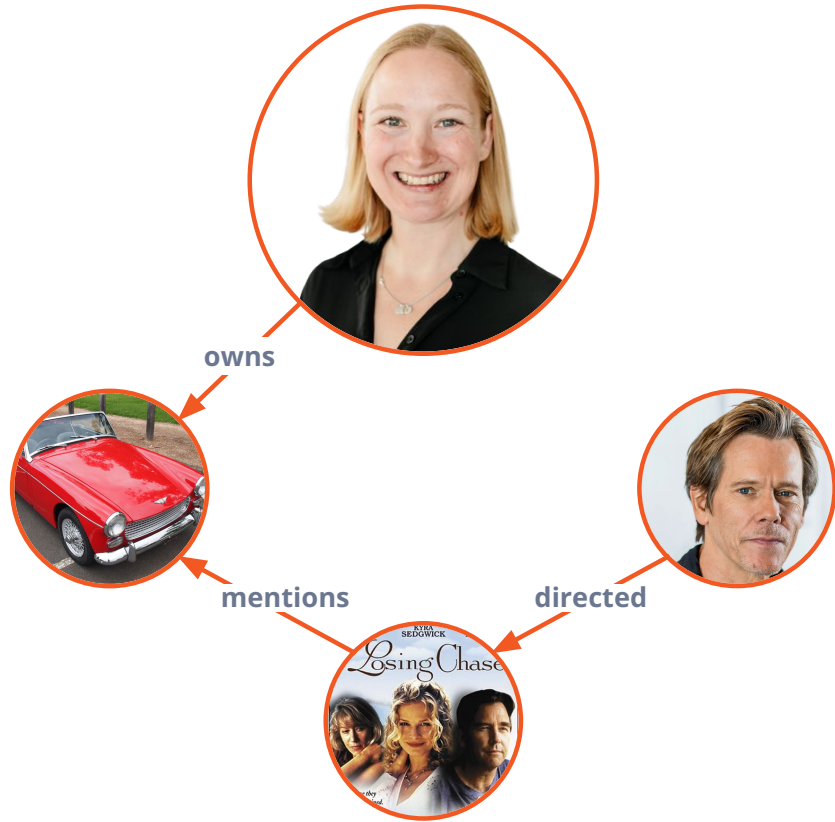
133 Benmore Drive
Suite 200
Winter Park, FL 32792

407-646-7070

407-646-7747

Machines need to be able to ***infer*** things to answer questions

How? By understanding the relationship between things.



The Agentic Web

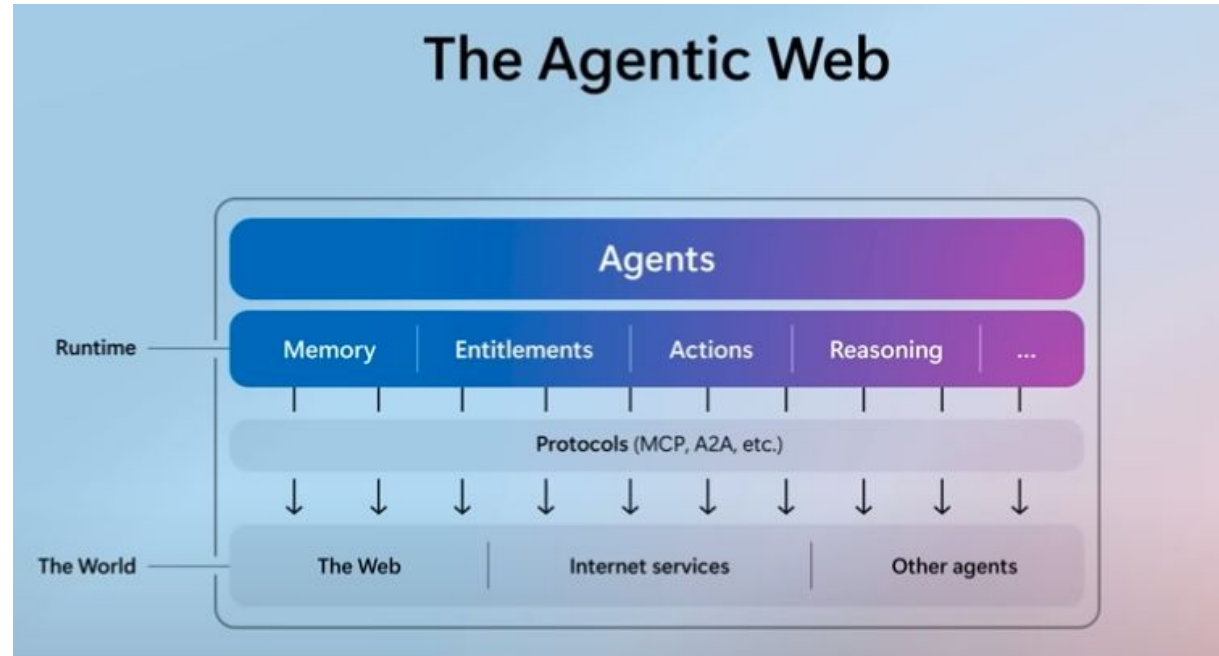


“The Semantic Web will enable machines to comprehend semantic documents and data, and enable software agents roaming from page to page to execute sophisticated tasks for users.”

Tim Berners-Lee, Ora Lassila, and James Hendler
[The Semantic Web, Scientific America, 2001](#)

Content is the fundamental building block.

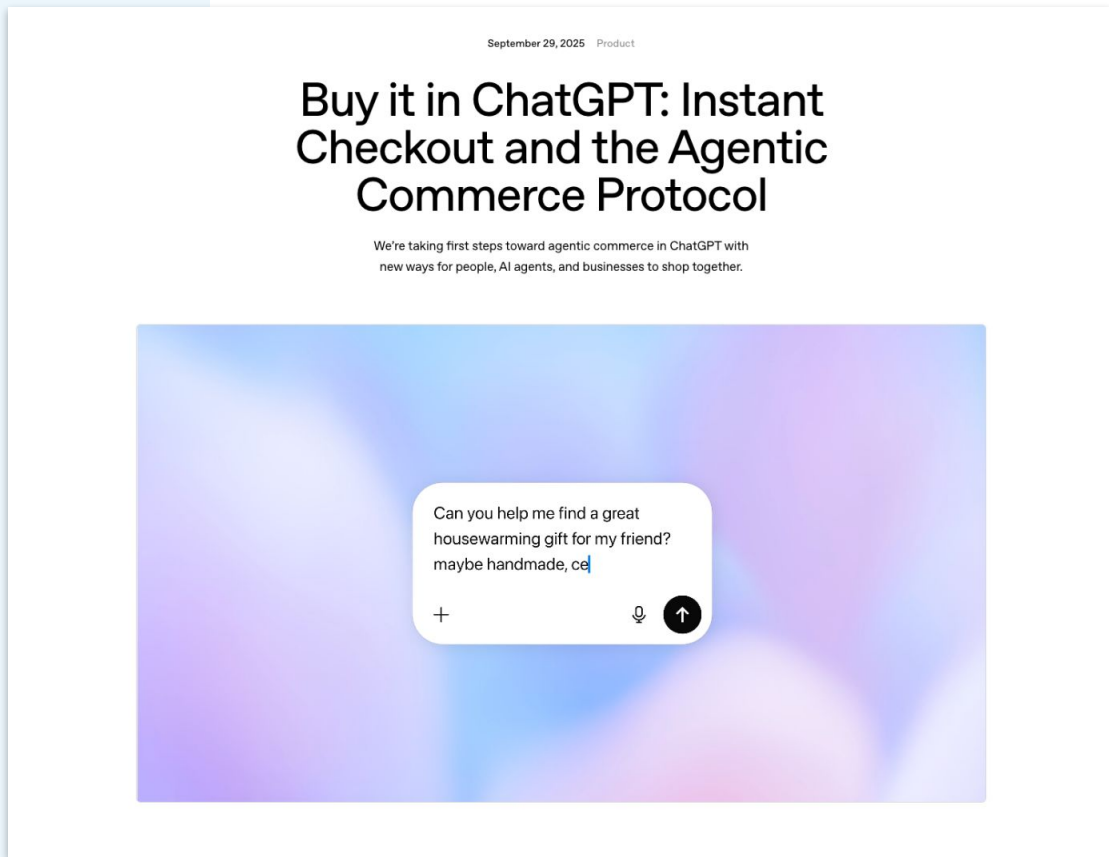
You need to translate it into structured data to ensure agents understand it with accuracy.



Agentic Commerce Protocol

Developed by OpenAI & Stripe

An open standard model for enabling structured, secure commerce flows between buyers, AI agents, and businesses.

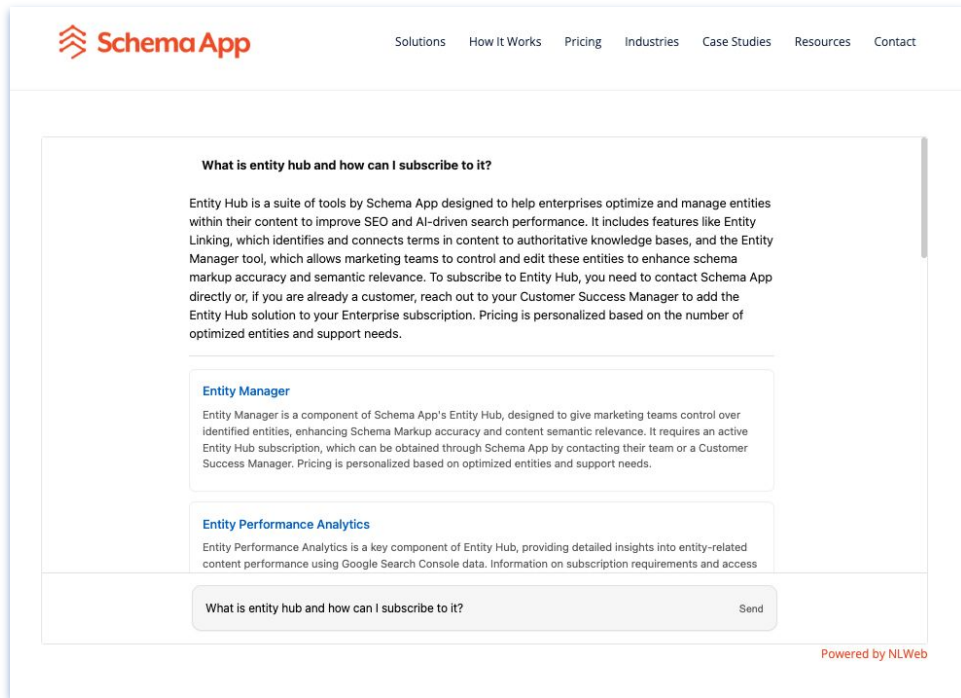




NLWeb

- Goal: Make it easy for any web publisher to create an intelligent, natural language experience for their site.
- Leverages semi-structured formats like Schema.org, RSS and other data that websites already publish.
- Created by RV Guha, who created Schema.org.

Source: Microsoft, May 19, 2025 – [Introducing NLWeb: Bringing conversational interfaces directly to the web](#)



Example of NLWeb on the Schema App Website



Schema Markup Is the Bridge Between
Your Content and AI Understanding.

Key Takeaways

- AI systems and search engines are only as good as the content they understand.
- Schema markup is key to AI systems understanding and contextualizing your content.
- Writing using structure makes it easier to add schema markup, which gets to the goal of content that is reusable, scalable and ready for every platform.
- Organizations need to start preparing for the agentic web today.

Questions?



Ahava Leibtag

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Aha Media Group
</in/ahavaleibtag/>



Scan the QR code to
download your FREE
Future of Search eBook

Link:
<https://ahamediaigroup.com/future-of-search/>



Martha van Berkel

CEO & Co-Founder
Schema App
</in/martha-van-berkel/>



Scan the QR code to download
our FREE **'Mastering AI
Search: Essential Strategies
& Insights'** eBook

Link:
<https://bit.ly/healthcare-ai-strategies>

