

# **GS1 Digital Link and the Product Knowledge Graph to boost your e-commerce strategy in 2024**

Jun 2024



# About WordLift

I Am

Co-founder and CEO

Linked Data Enthusiastic



We Are

- 01 Building Product Knowledge Graphs to automate SEO and Marketing Tasks
- 02 Highly focused on improving Data Quality and bringing Clear ROI
- 03 Grounding GenAI and Semantic Search with *(semantic)* Product Data

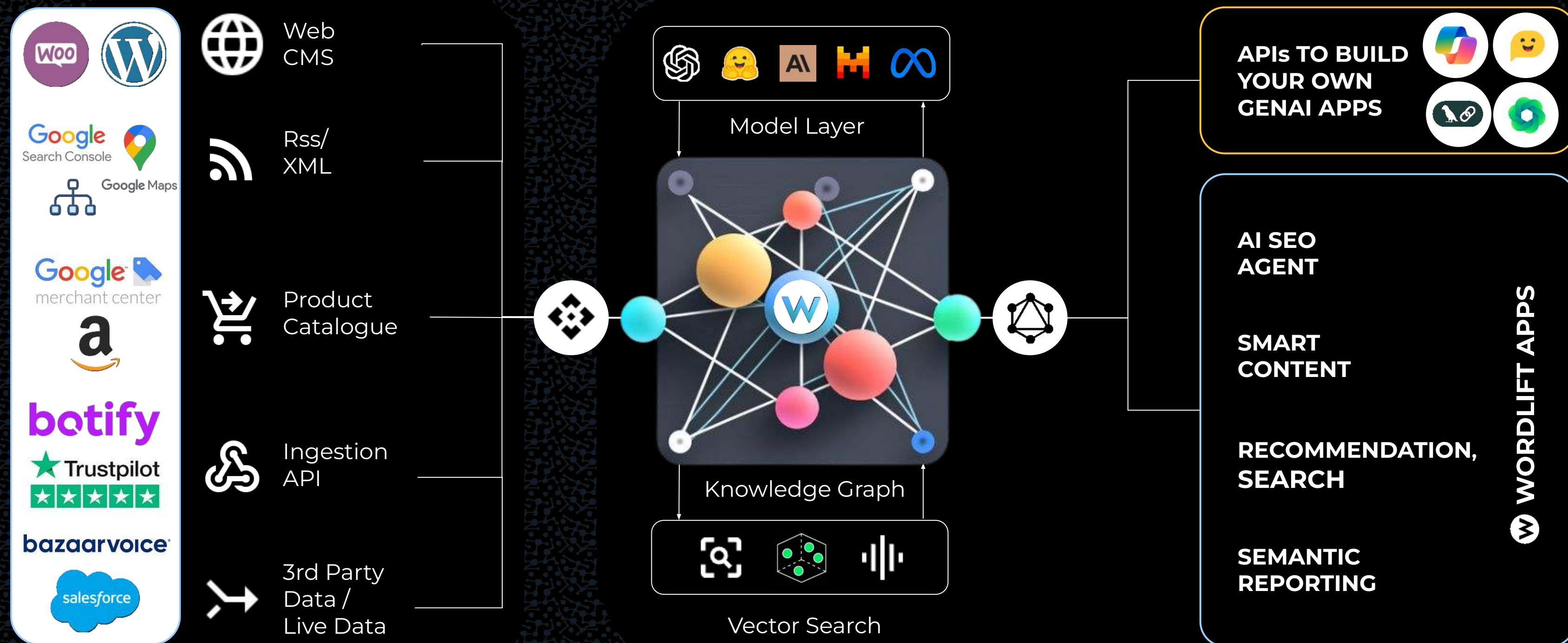


# A LARGE ACTION MODEL for MARKETING AUTOMATION

## DATA INGESTION

## KNOWLEDGE GRAPH CREATION & ENRICHMENT

## APIs & AI APPS



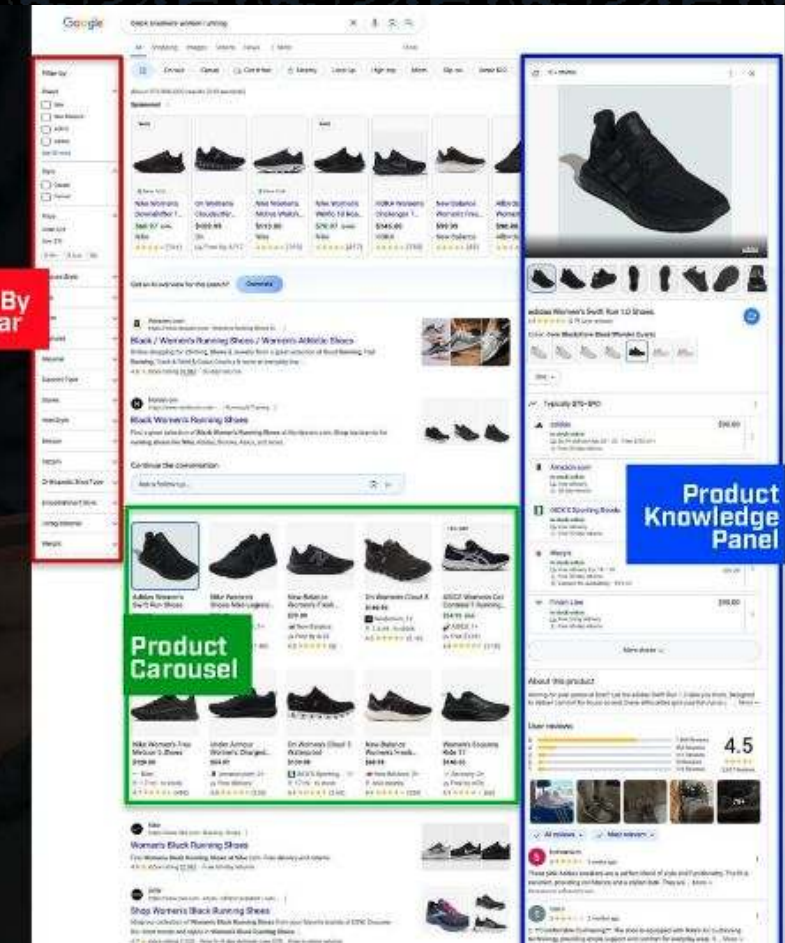


# Google is a Marketplace

DON'T LISTEN TO ME, LISTEN TO ALEYDA SOLIS (FULL DECK [HERE](#))

Google has really become a merchant marketplace, with features driving direct visibility to PDPs

Filter By Sidebar



# Google is a Walled Garden

DON'T LISTEN TO ME, LISTEN TO BARRY ADAMS (FULL DECK [HERE](#))

And now Google is becoming a Walled Garden



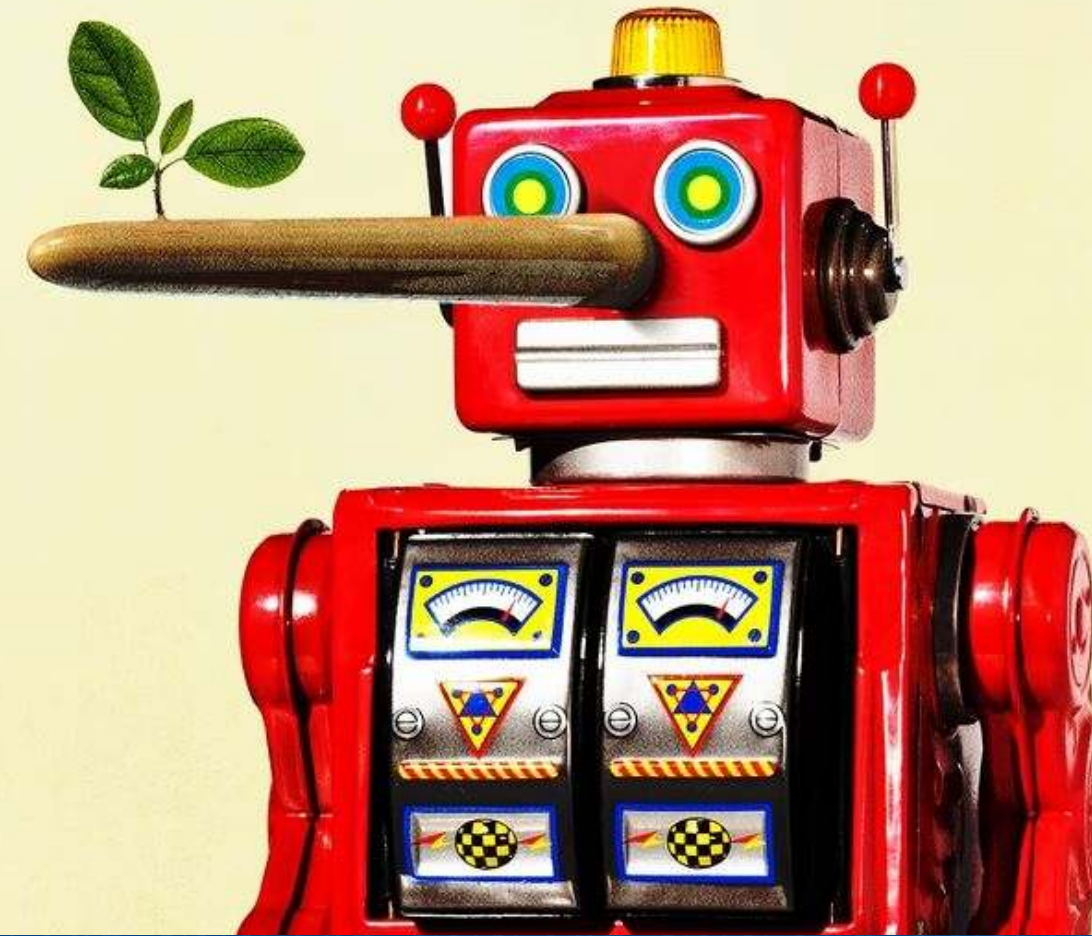


# Google is [...] a libel machine

DON'T LISTEN TO ME, READ MATTEO WONG ON THE ATLANTIC (FULL ARTICLE [HERE](#))

# Google is full of spam

DON'T LISTEN TO ME, FOLLOW LILY RAY (FULL DECK [HERE](#))



**M** | Moz  
Con

- ❖ Study the manual actions and spam violations in great detail.
- ❖ Every tactic must be evaluated for spam potential.
- ❖ This is an essential part of your job.

@lilyraynyc



# Google has a Shopping Graph

OVER 40 BILLIONS PRODUCTS AND ATTRIBUTES DRIVING AN AI-PACKED CX DIRECTLY ON GOOGLE SERP INCLUDING AIO, VIRTUAL TRY-ONS, STYLE PICKS, PRICE TRACKING, QUICK CHECKOUT, DIGITAL COUPONS AND A LOT MORE.





When querying Google with a clear buying intent, Google Shopping (among other things) adds **filters** to guide the journey.

Visibility in Search is **shifting from PLPs to PDS**.

Google

long lasting mascara

10+ stores

Filter by

Get it fast

On sale

Small business

Features

☐ Waterproof

☐ Hypoallergenic

Color Family

☐ Black

☐ Brown

☐ Blue

☐ Purple

☐ Green

Brand

Price

Under \$6

\$6 - \$10

\$10 - \$25

Over \$25

\$ Min \$ Max Go

Stores


Sustainability

☐ Cruelty-free

☐ Organic

☐ Fair Trade

Size




Glossier Lash Slick Lift & Curl Mascara

\$20.00

Glossier, 5+

4.1 (2.1K)




YSL Lash Clash Mascara

\$32.00

YSL Beauty, 10+

4.5 (10K)




Honest Beauty Extreme Mascara

\$19.99

Honest Beauty, 10+

4.3




Maybelline Lash Sensational Sky High Mascara

\$9.00

Amazon.com, 10+

4.4 (13K)

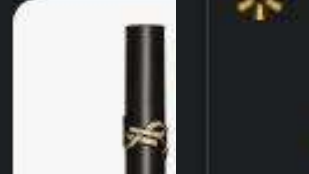


Maybelline The Falsies Lash Lift Mascara

\$9.98

Amazon.com, 10+

4.7 (82K)




Yves Saint Laurent Lash Clash Mascara

\$32.00

YSL Beauty, 10+

4.5




benefit BADgal BANG! Mascara

\$16.00

Ulta Beauty, 10+

4.2 (31K)




Rare Beauty by Selena Gomez Lash Squeezy Mascara

\$20.00

Rare Beauty, 10+

4.4 (6.8K)



Lancôme High Definition Mascara

\$34.00

Lancôme, 10+

4.5

Target

Urban Decay Perversion Volumizing Mascara - 0.13 fl oz - Ulta Beauty

In stock online

\$5.99 2-day delivery · Free \$35+ · Free 90-day returns

Visit site

Buy now

Walmart - PerfumesAmerica

Perversion Mascara - Black by Urban Decay

In stock online

Free delivery est. by Feb 23

Visit site

Macy's

Urban Decay Travel-Size Perversion Mascara, High Pigment, Classic Wand, Lengthening, Defining, Wand,...

In stock online

\$10.95 delivery Feb 26 - 29 · Free 30-day returns · FREE 5-Pc. gift w/ \$100 Beauty or Fragrance

Visit site

Kohl's

Urban Decay Perversion Volumizing Mascara, Size: 0.4 FL Oz, Black

In stock online

\$8.95 delivery · 180-day returns

Visit site

Nordstrom Rack

Urban Decay Perversion Volumizing Mascara at Nordstrom

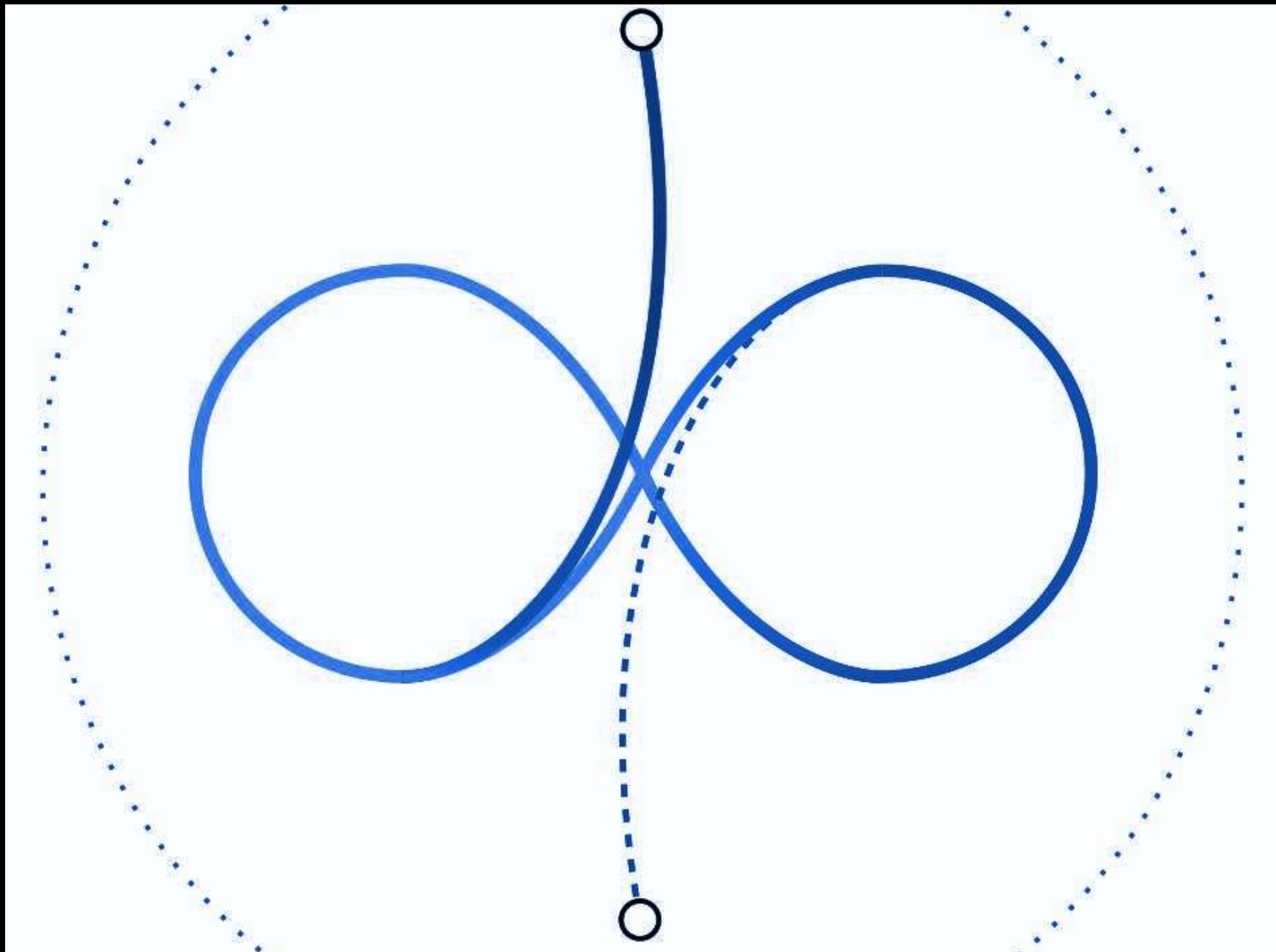
Visit site

I want to be able to buy from Google SERP via GPay, seamlessly

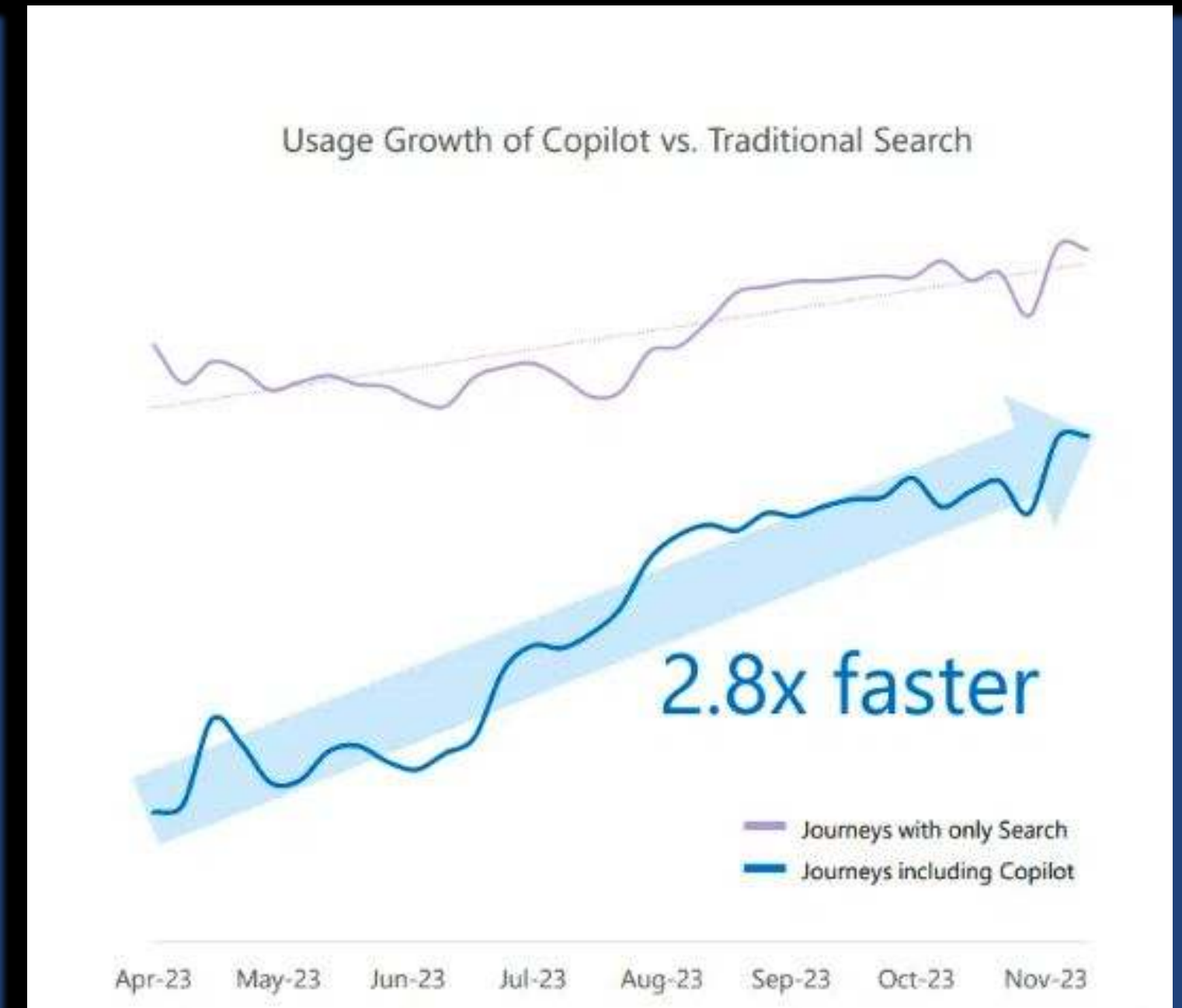
W



# AI is designed to Search faster



Source: Google - 'messy middle' of the purchase journey



Source: Microsoft Internal data on Copilot adoption.



# The Problem with GenAI

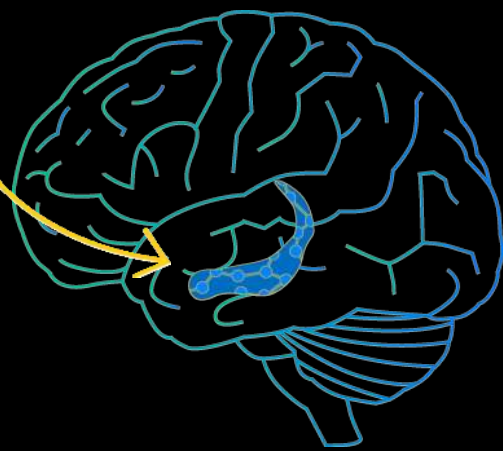


Thoughts exist without language. LLMs don't have a persistent memory. LLMs and GenAI can't reason.



# Why Brands Need Graph Data?

long-term  
memory (LTM)



Leverage a **marketing-oriented knowledge graph** as the **long-term memory of your organization**, to boost *creativity, reasoning, and generalization*. This is seamlessly integrated with a **large action model automating SEO and marketing tasks**.

DOLCE & GABBANA



Coca-Cola  
HBC

OAKLEY

FARFETCH

SCAROSSO



TARGET  
Optical

Ray-Ban

THE LEVEL GROUP





# The Problem with Products **Online** and on the **Shelf**

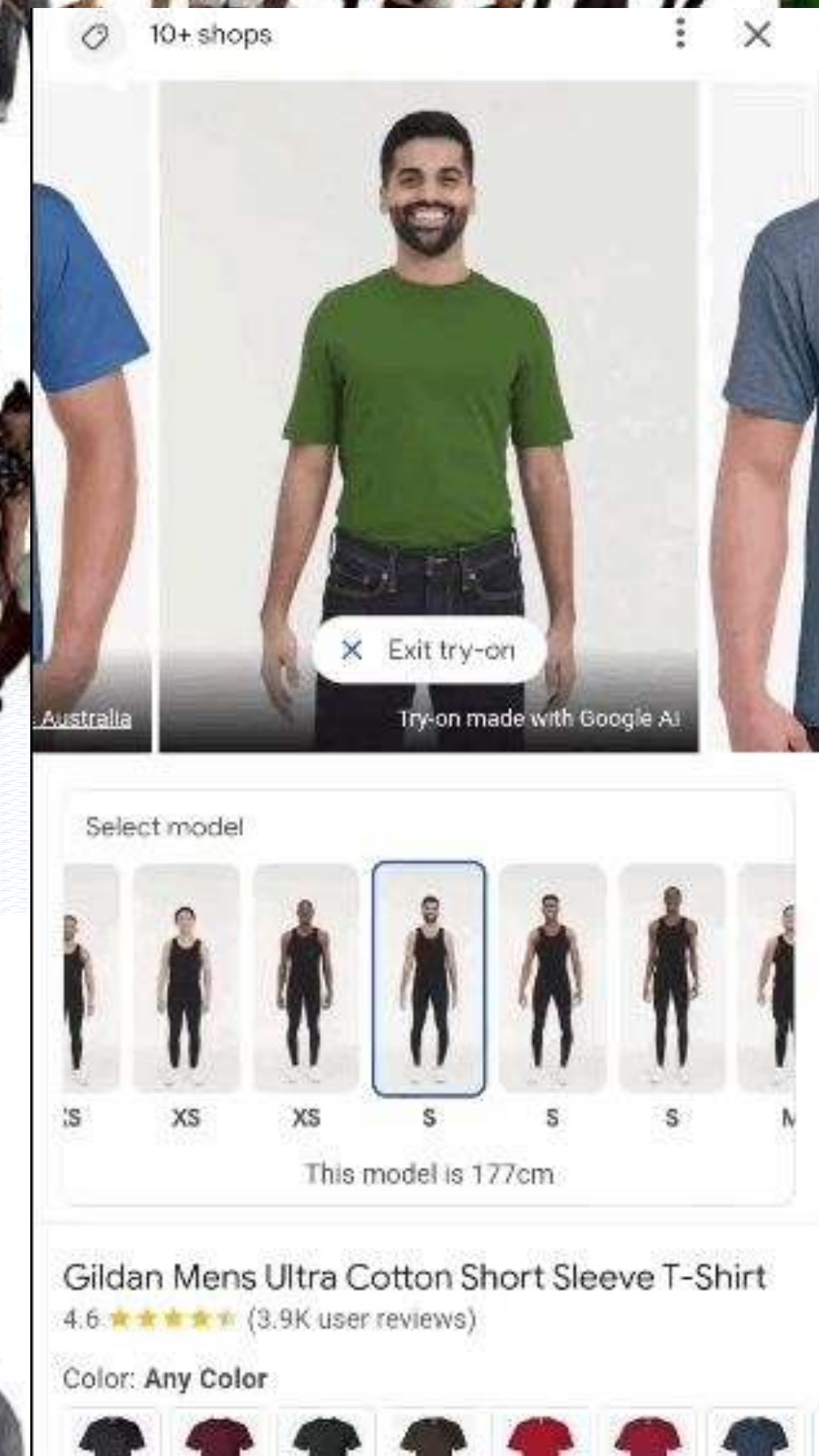
Data behind them is not linked...





# Yet, customers (and stakeholders) are!

- They scan, search, compare, try-on look for all kinds of data on and off-line
- So do their CONVERSATIONAL ASSISTANTS, APPs and APIs







# Enter the Data Angle

E-commerce customer touch points are **data touch points**.

THINK:

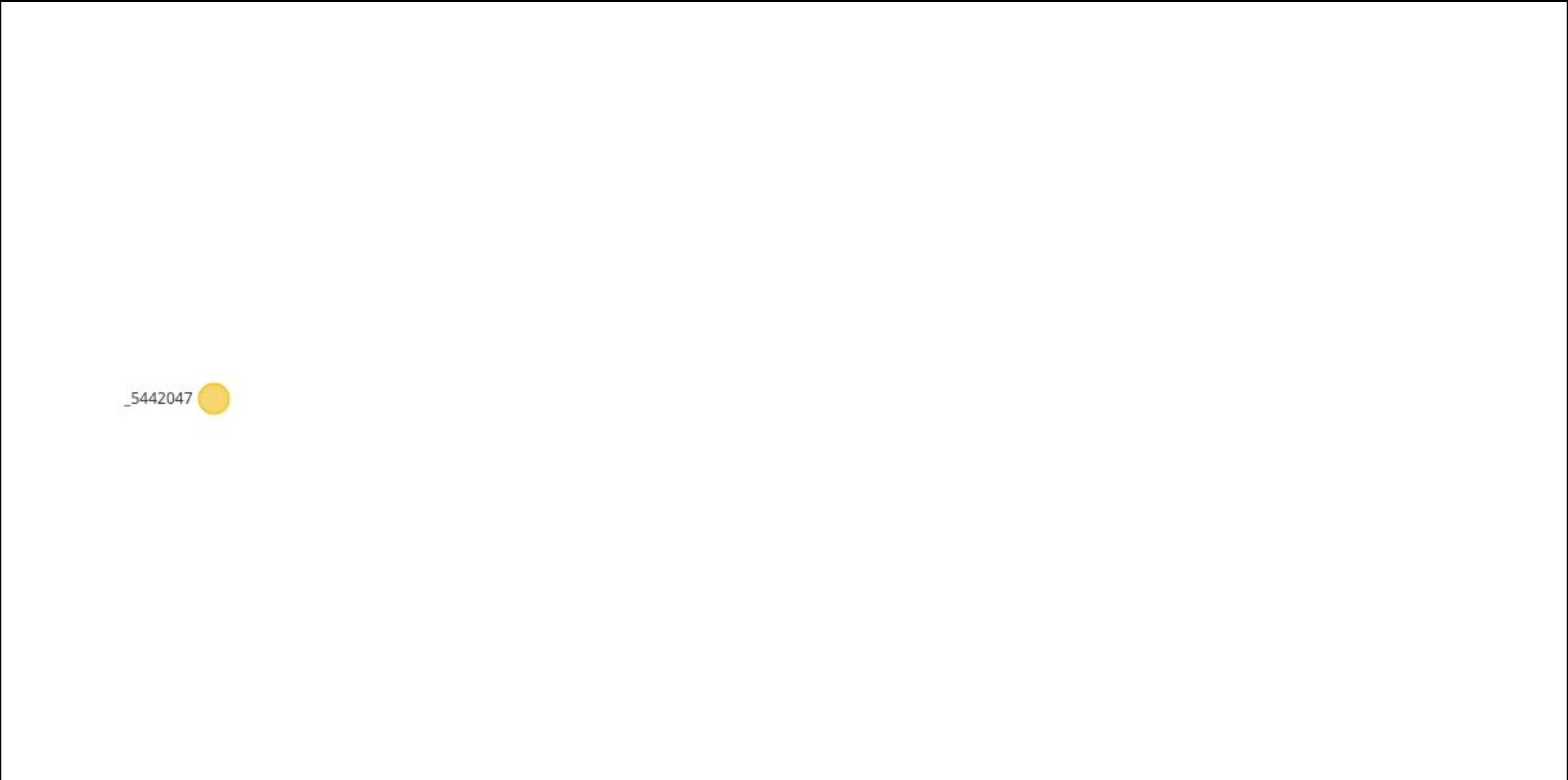
1. Product Data
2. Reviews
3. FAQ
4. 3D Model
- 5 ...



# Building a Product Knowledge Graph

Double-breasted cotton Linen

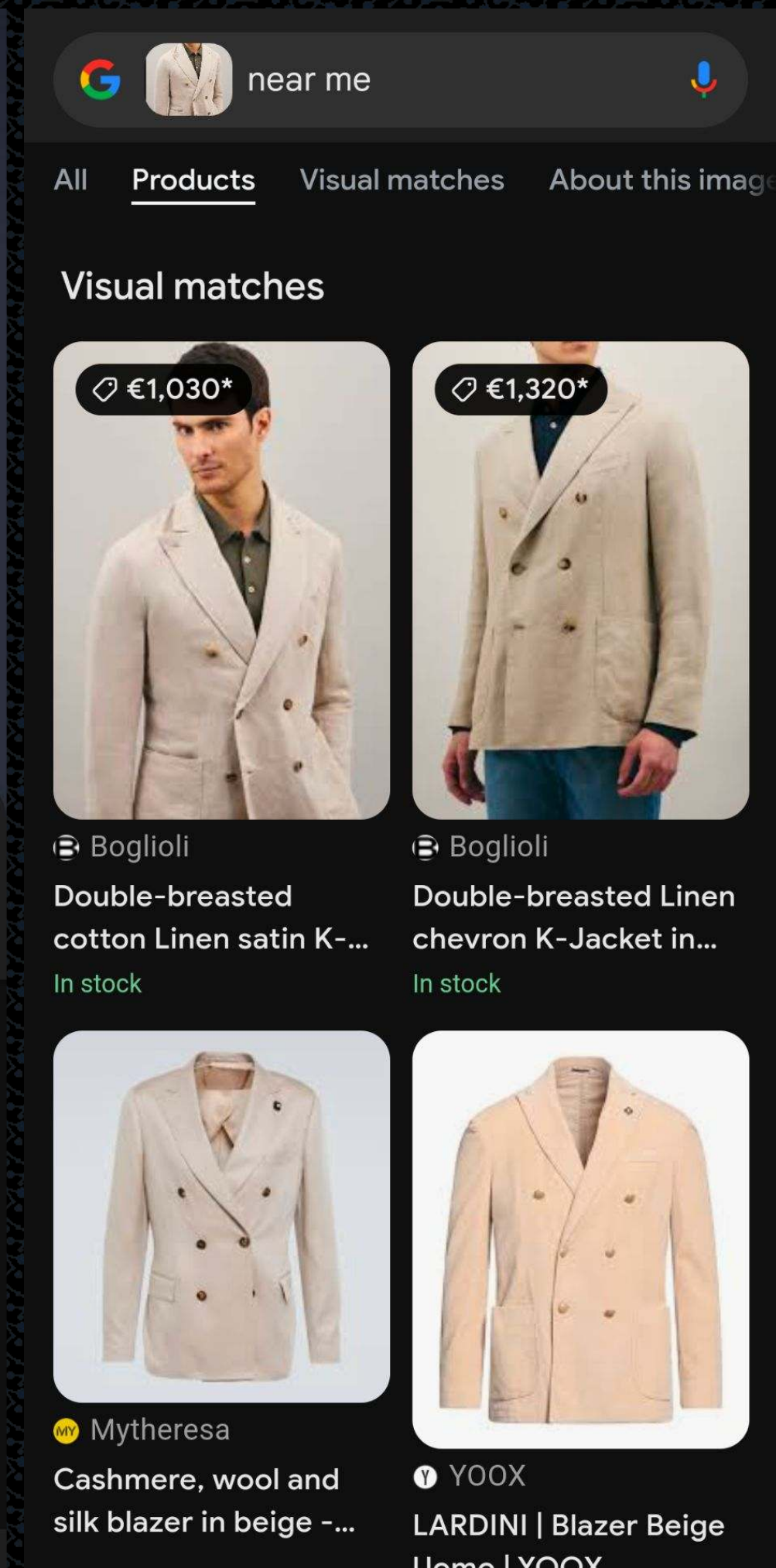
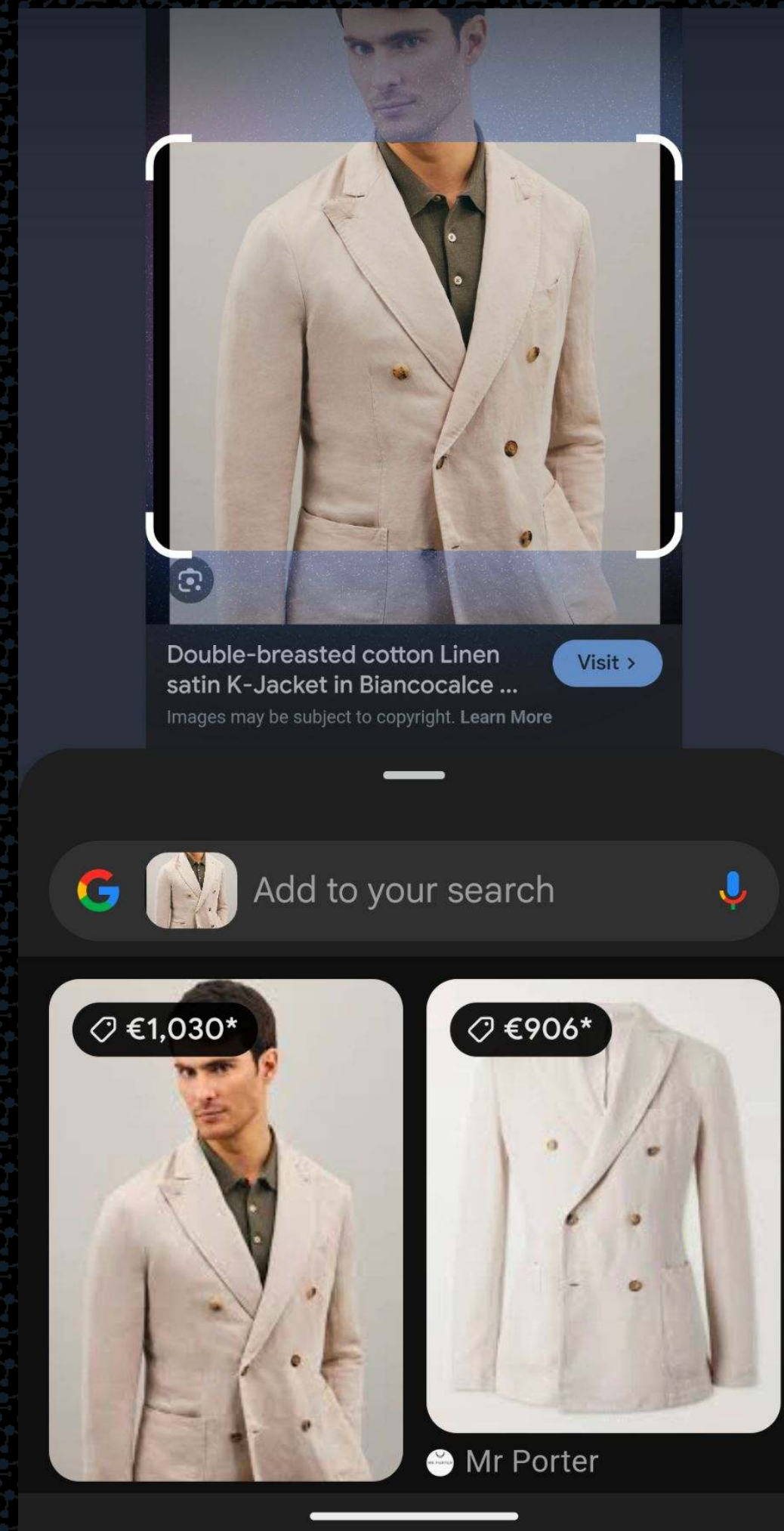
satin K-Jacket





# Physical is no longer an island

As a manufacturer you can not only be putting the product on the shelf in the store, but also the product (AND ALL ITS LINKED DATA) in the information field [the cyber market ecosystem] your customer is navigating.





# Benefits of a GS1 Link "*speaking*" Linked Data.

- **Helps your customer**

Providing up-to-date information straight from your digital ecosystem.

- **Underpins your data strategy with an URI**

All data, across the entire value chain, encoded behind one single URI.

- **Improves your brand visibility**

Letting 3rd party developers (as well as in-house developers) smartly re-use all product's data.

- **Enriches your Product Graph using an Open Standard**

GS1 identifiers as persistent URLs for all items.



# The GS1 Digital Link in Action





# 5 ★ Linked Data GS1 Digital Link

- **Native GS1 Digital Link is an Entity ID**
  - **@id and schema:hasGS1DigitalLink express the same value**
  - **Backed by a real Knowledge Graph**
  - **Fully dereferenceable based on Linked Data specification**
  - **Referenceable by other datasets, like Wikidata, DBpedia, ...**
  - **And more**







**Can we  
Transform the  
Customer  
Experience  
with  
Generative AI?**



**SEO**



**AI-CONTENT  
EXPERIENCE**



# PDP Optimization - Variant

## STANDARD



ALL PRODUCT  
VARIANT SHARE  
THE SAME  
DESCRIPTION

Made from a cotton-silk blend yarn, this polo shirt offers a light and soft feel, ensuring a comfortable and refined fit. The garment-dye technique adds color depth and unique character. The ribbed sleeve bottom and knit add a touch of elegance and structure to the overall design.

## AI-GENERATED



EACH PRODUCT  
VARIANT GETS ITS  
OWN  
PERSONALIZED  
DESCRIPTION

Crafted from a cotton-silk blend yarn, this **green polo shirt** in **size XXL** provides a light and soft feel, ensuring a comfortable and refined fit. The garment-dye technique enhances the color depth and unique character. The ribbed sleeve bottom and knit add a touch of elegance and structure to the overall design.



# GMC Optimization - Product Highlights

 Merchant Center experience and  Google Merchant Center Next

[product\_highlight]

**A** Agent WordLift 04:52 PM

I received the configuration and I am now working on the website <https://www.ray-ban.com/uk> using English.



**Y** You 04:52 PM

Find me everything on the website on the Ray-Ban RB3565. Based on this information write me a short bulleted lists of the most relevant highlights of your products. The highlights you provide should help shoppers with easily consumable, quick-to-scan sentence fragments that answer the most common consumer questions or that focus on the most important attributes of the product.

Do not mention discounts and ensure that the provided content complies with data privacy regulations.

>>  Type your message here...



Agent WordLift can make mistakes. Consider checking important information

Using WordLift [AI SEO Agent](#)

## AI-GENERATED



**EACH PRODUCT  
GETS ITS MOST  
RELEVANT  
HIGHLIGHTS**

- **Customizable frames and lenses:** Design your own shades for a personalized look.
- **Prescription available:** Add your prescription to any pair for clear vision.
- **Multiple frame colors:** Choose from gold, copper, and black metal frames.
- **Lens options:** Available in Pink/Brown, Black, and Clear/Blue lenses.
- **Free shipping and returns:** Enjoy hassle-free shopping with free next-day delivery and returns.



# Neural Search Wine Pairing 🍷 AI Sommelier

F



Montepulciano  
d'Abruzzo DOC  
Borgo  
Thaulero 2022




€ 6,90

Sangiovese  
Terre di Chieti  
IGT Borgo  
Thaulero 2022 -  
Casal Thaulero



€ 6,90



Powered by  OpenAI

in partnership with





# Neural Search Wine Pairing 🍷 AI Sommelier

Find me the best wine for this



**Bianco Venezia  
Giulia IGT -  
Dario Princic**



€ 22,05

**Bianco Trebez  
Venezia Giulia  
IGT 2020 - Dario  
Princic**




€ 37,90

**Slatnik Bianco  
Venezia Giulia  
IGT 2021 -  
Radikon**



€ 35,00



Powered by  OpenAI

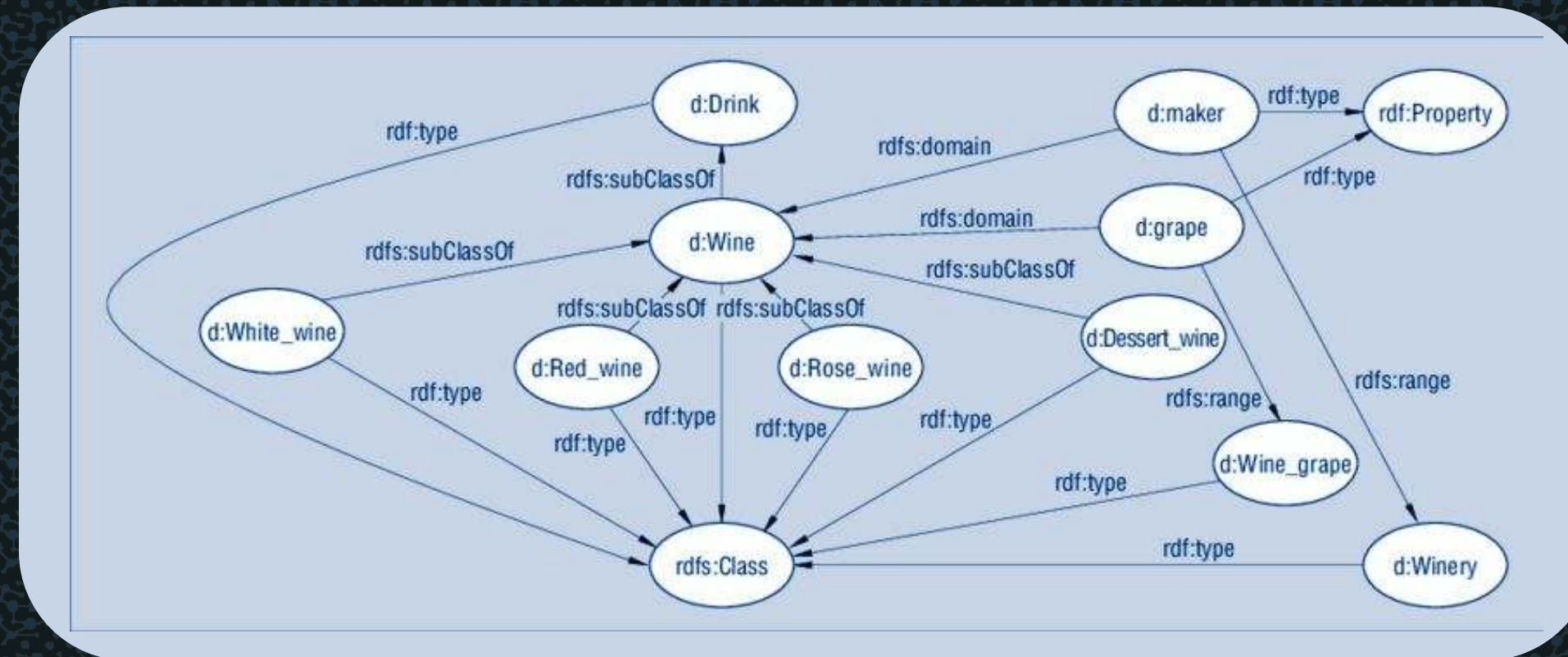
in partnership with



ETILKA

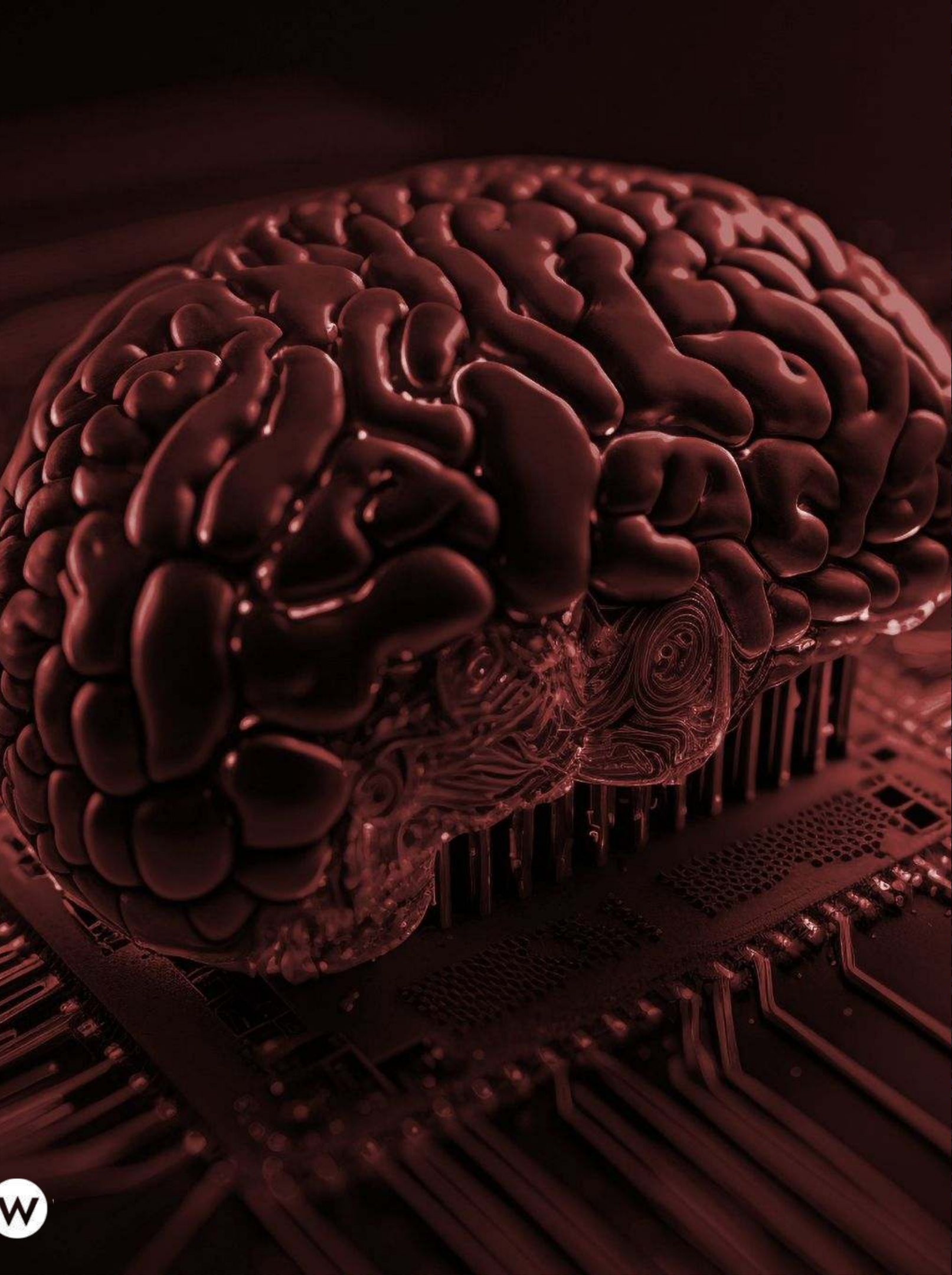


# The Wine Ontology



- A public namespace **<https://w3id.org/wine/>**
- **32 dedicated properties** abiding to international standards to define and assess wines, like acidity, alcohol, vintage, ...
- **Extends the schema.org** and reuses classes like Winery
- **Existing business use cases** powering AI Agents and Vector Search





# GenerativeAI needs Semantic Data

Every product is different. Every  
Brand is unique.

THINK:

1. Product Data
2. Search Queries
3. Upcoming Trends
4. Content Guidelines
- 5 ...



**THANK YOU!**



**Start Building Your  
Knowledge Graph Now and  
Get 20% Discount!**

Contact us at [silvia@wordlift.io](mailto:silvia@wordlift.io)

