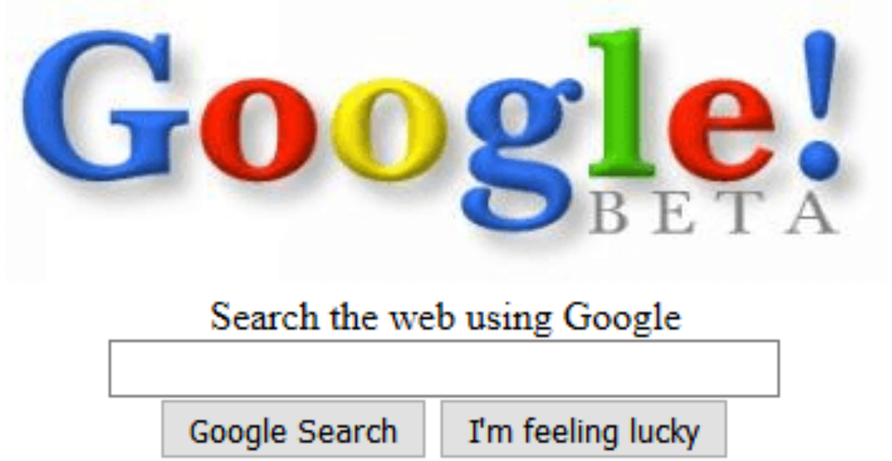
SearchPilot

The End of The Google Era?

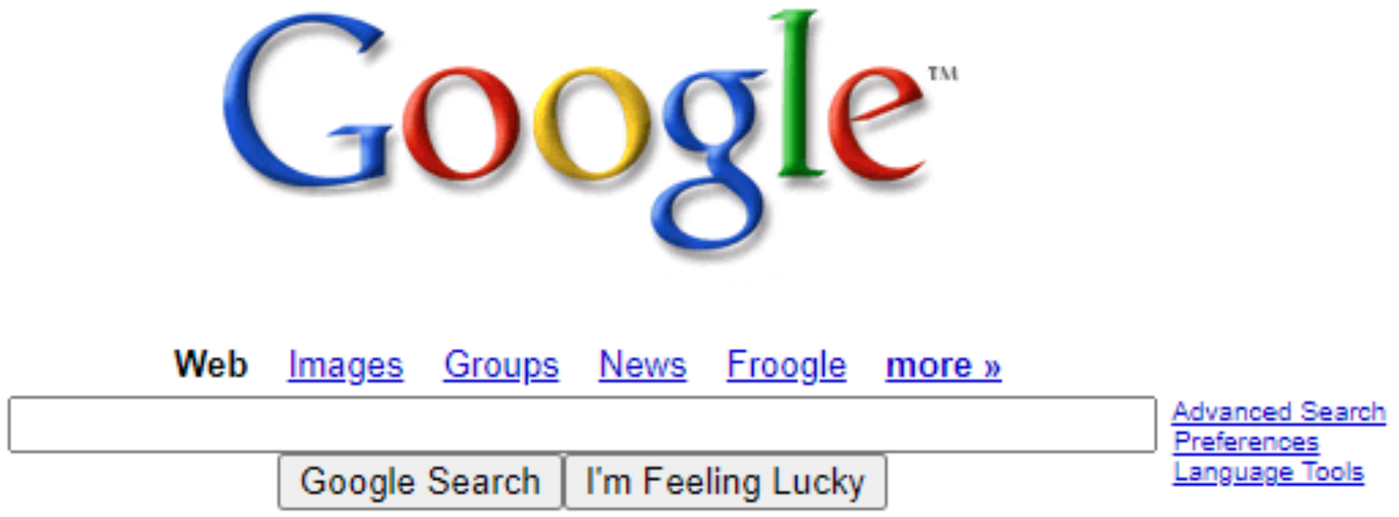
Thinking about the next generation of search.

Bluesky: TomAnthony



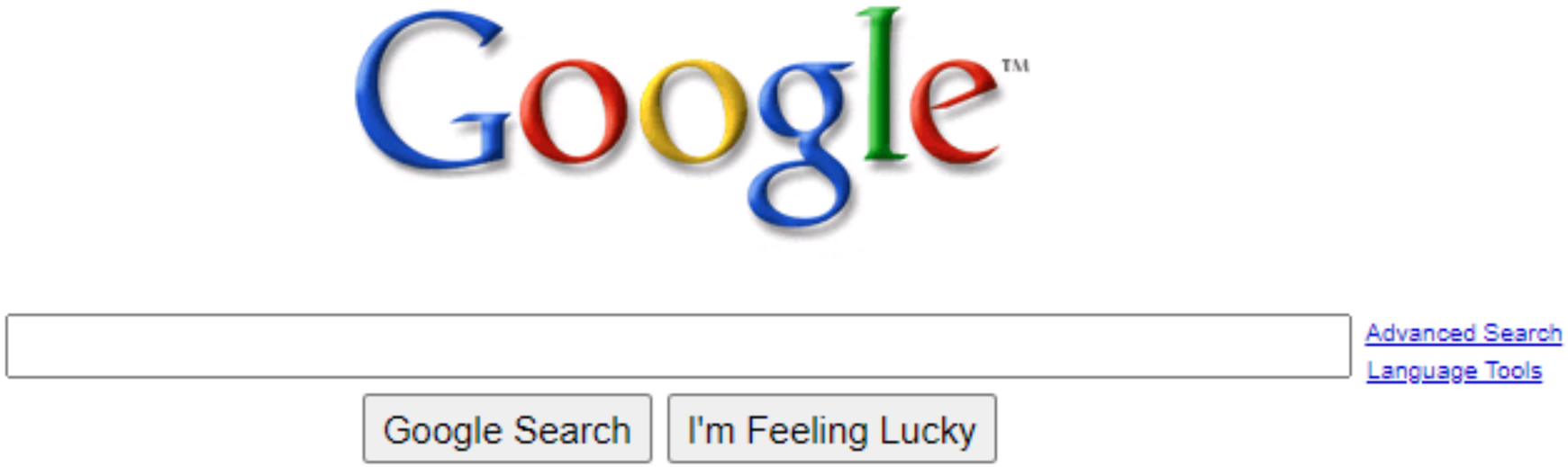
1999

Source: webdesignmuseum.org



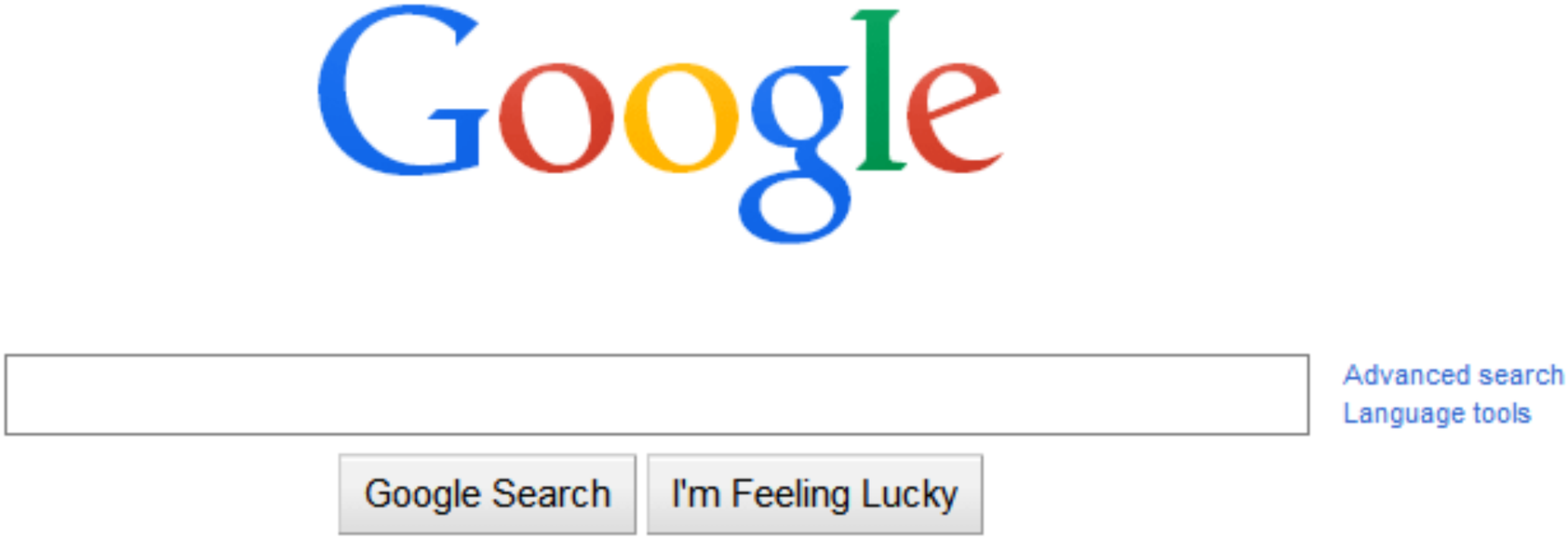
2004

Source: webdesignmuseum.org



2009

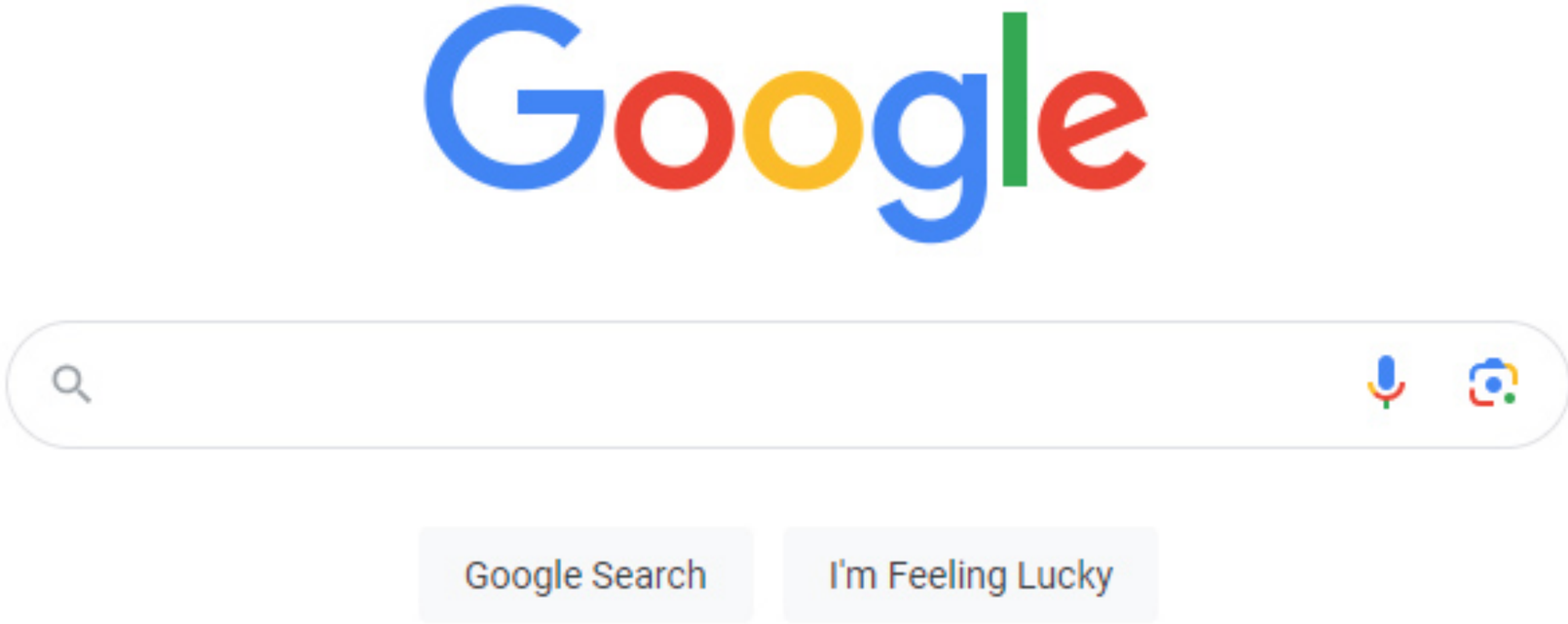
Source: webdesignmuseum.org



2014

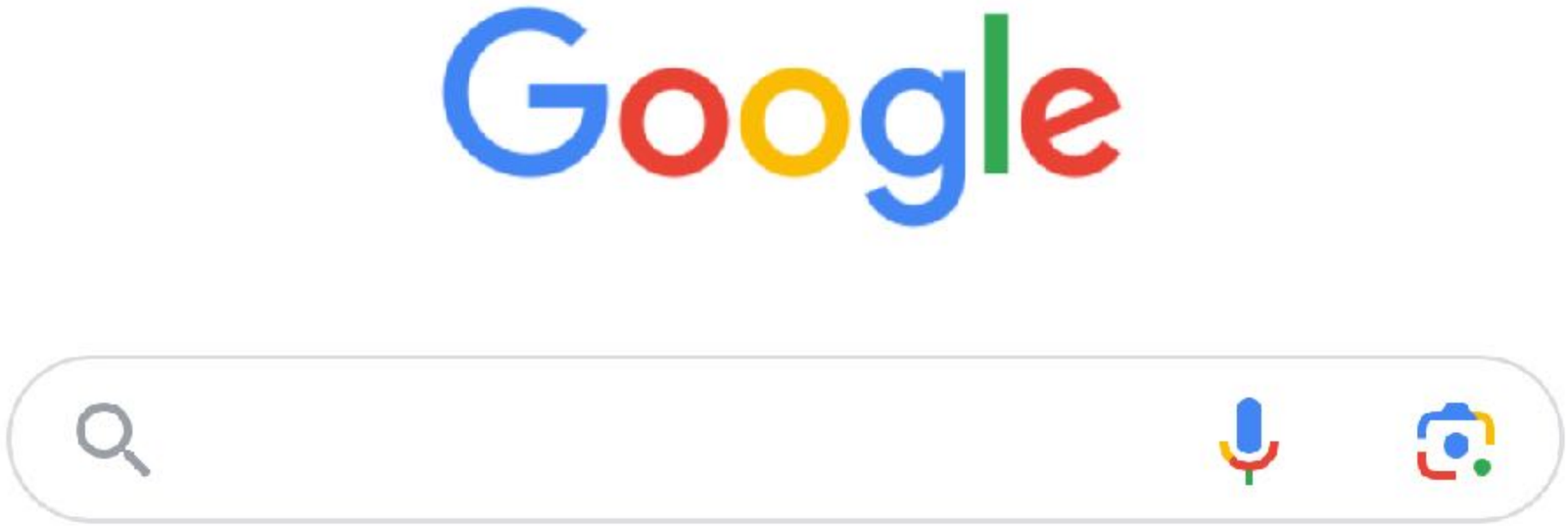
Source: webdesignmuseum.org

Source: webdesignmuseum.org



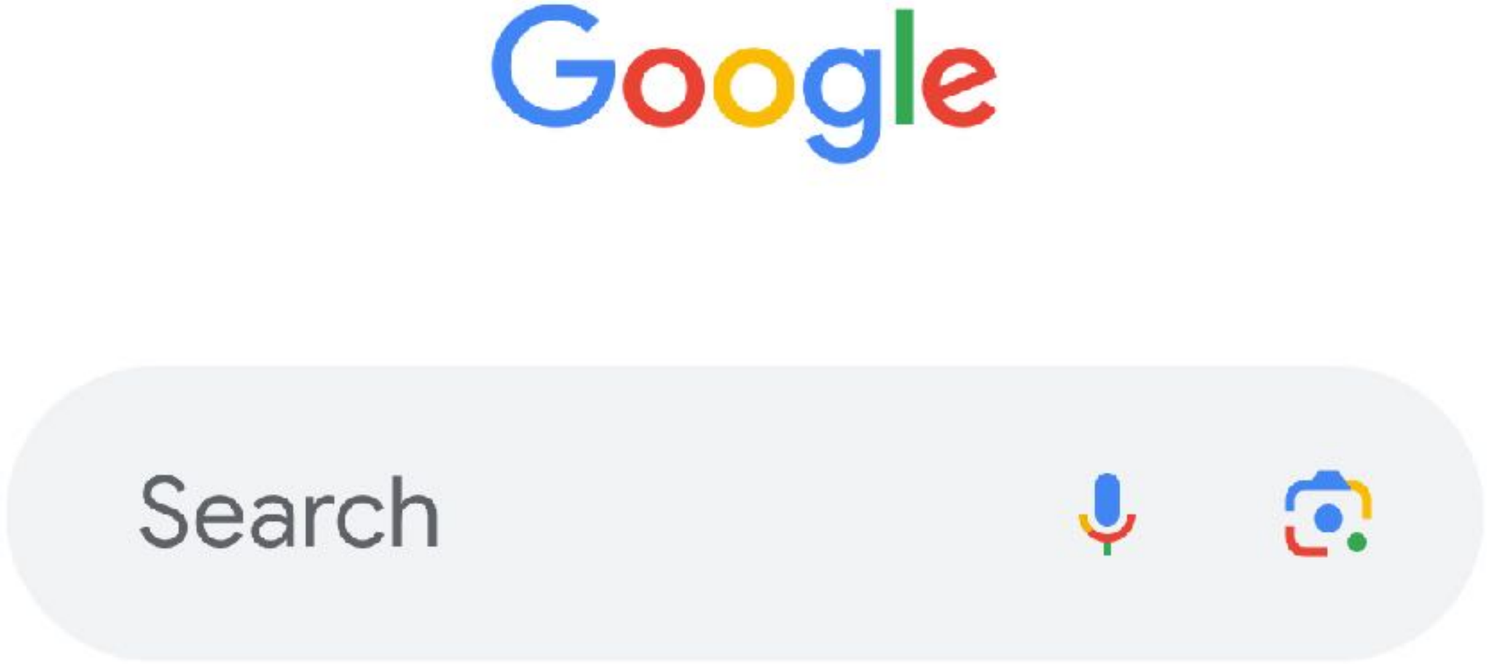
2024

Source: webdesignmuseum.org



2024
On Mobile

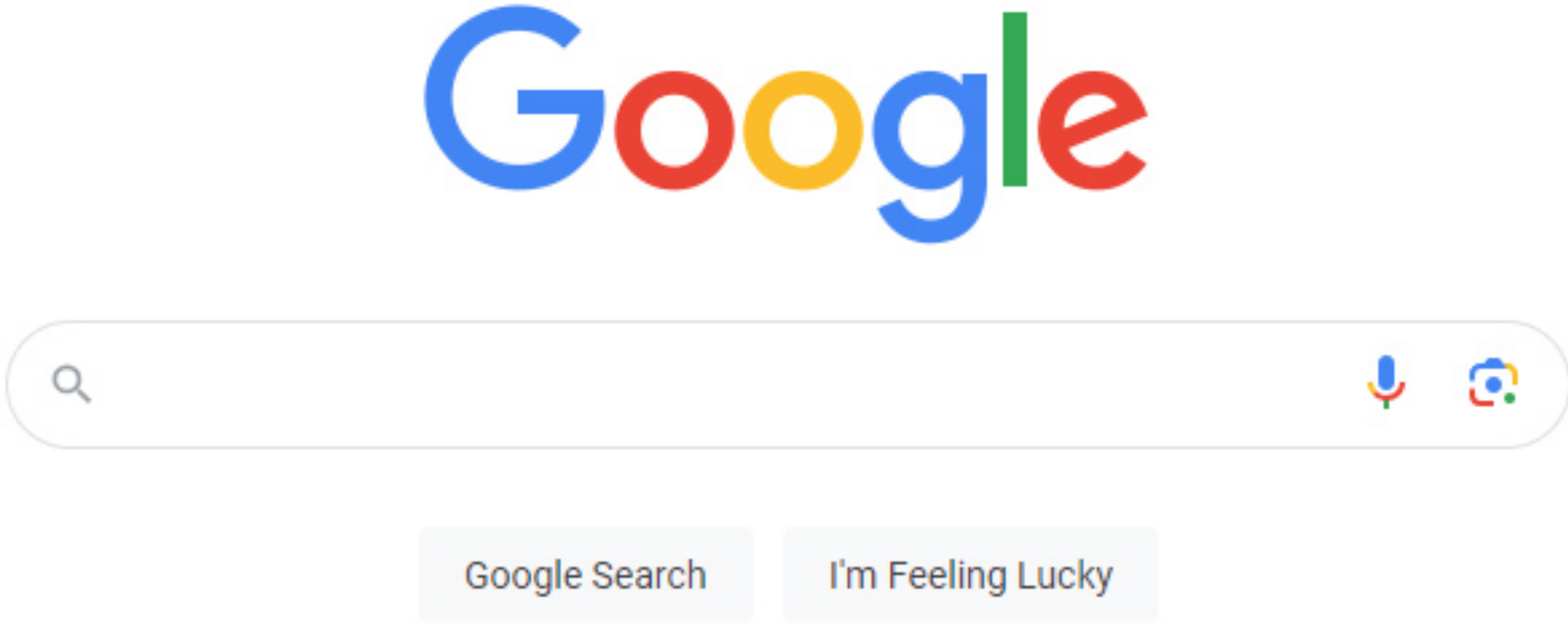
Source: webdesignmuseum.org



2024

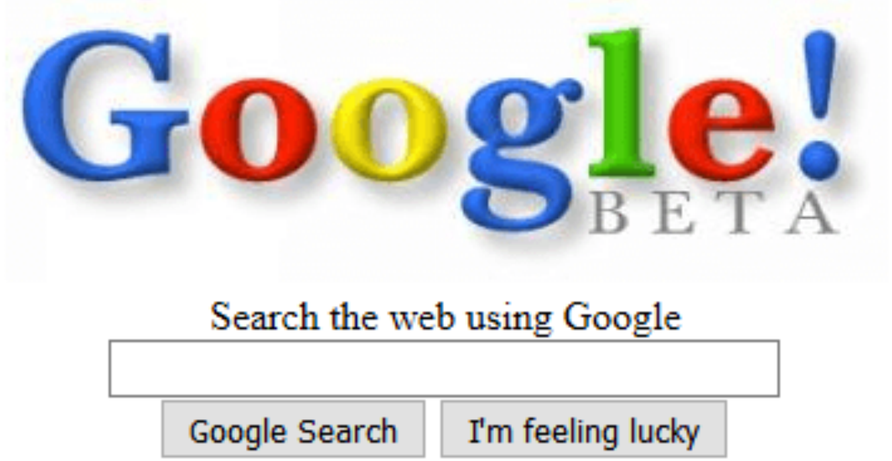
Mobile App

Source: webdesignmuseum.org



2024

Source: webdesignmuseum.org



1999

Source: webdesignmuseum.org

Google's Primary Interface Is Over **25 Years Old**

It has **dominated** search during that time.

Our **Mental Model** of What a **Search Engine** is **Out of Date**...

...but like **fax**,
it'll take years for the shift.

1
2
3
4

1

2

3

4

The
Google Era

1

The
Google Era

2

5 Years Ago:
LLMs

3

4

1

The
Google Era

2

5 Years Ago:
LLMs

3

5 Years Ago:
Mobile Traffic

4

1

The
Google Era

2

5 Years Ago:
LLMs

3

5 Years Ago:
Mobile Traffic

4

Takeaways

1

The Google Era

2

5 Years Ago: LLMs

3

5 Years Ago: Mobile Traffic

4

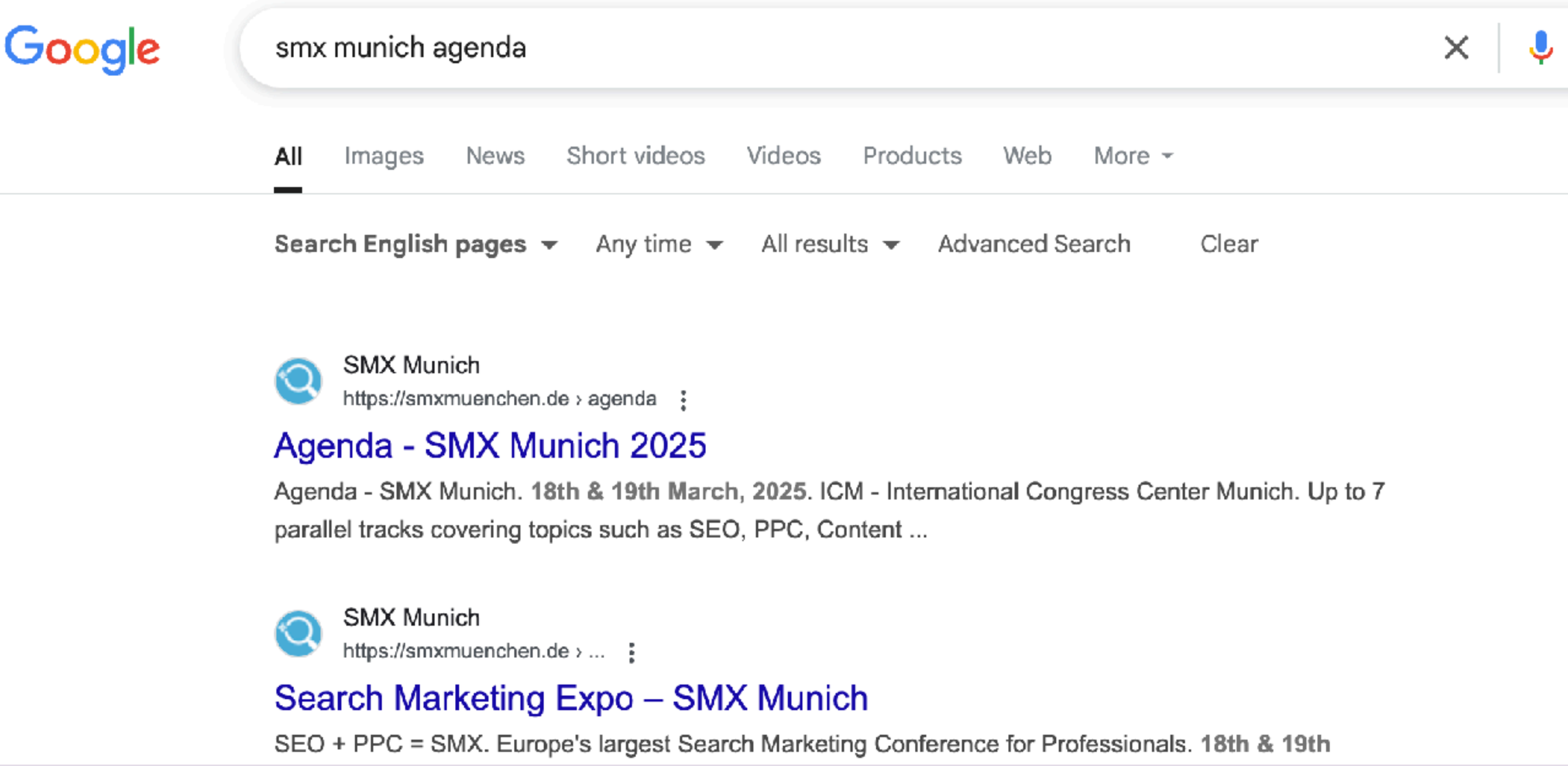
Takeaways

1

The Google Era

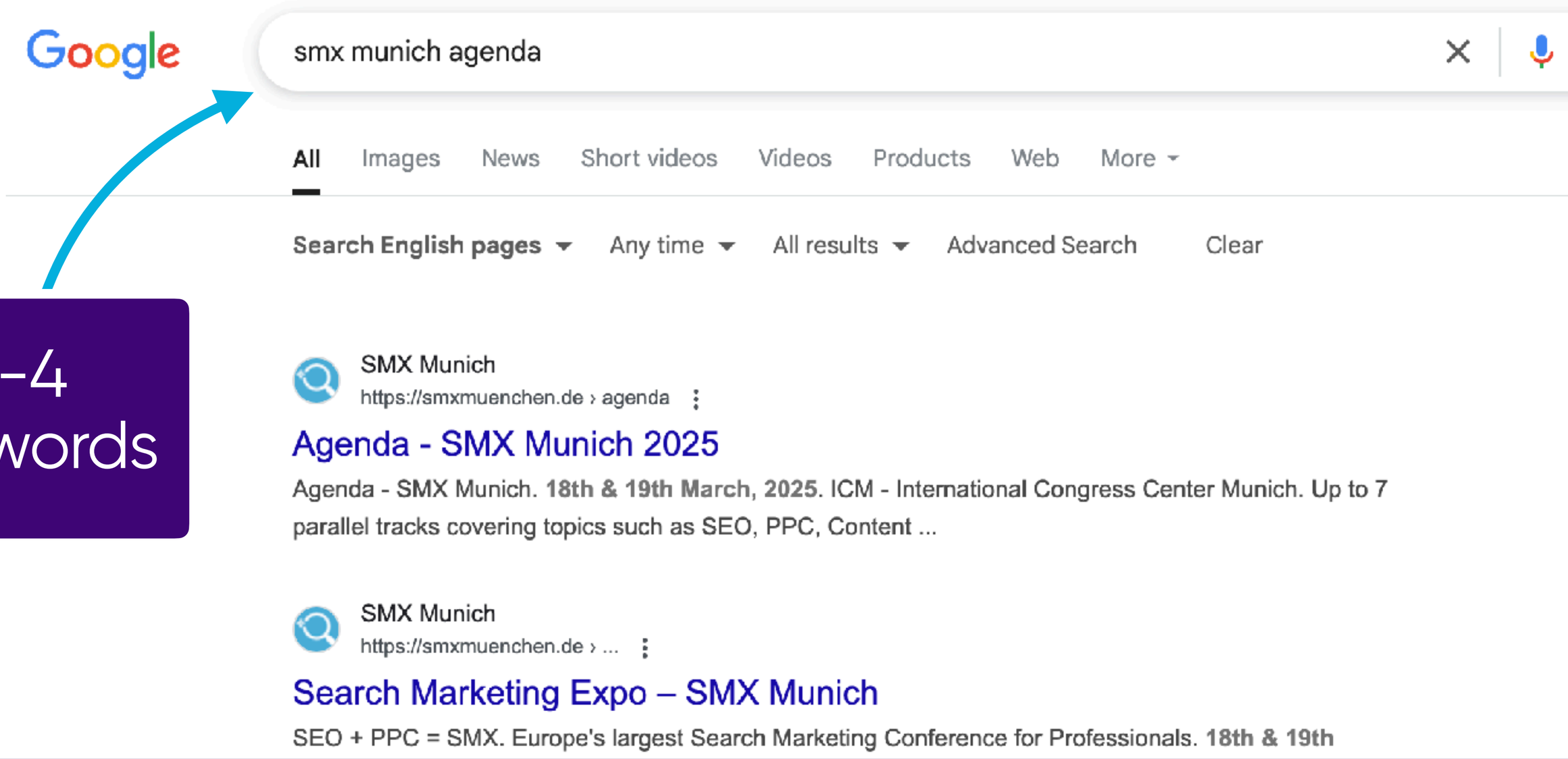
1999-2025: Web Search Dominates

A Typical Google Search

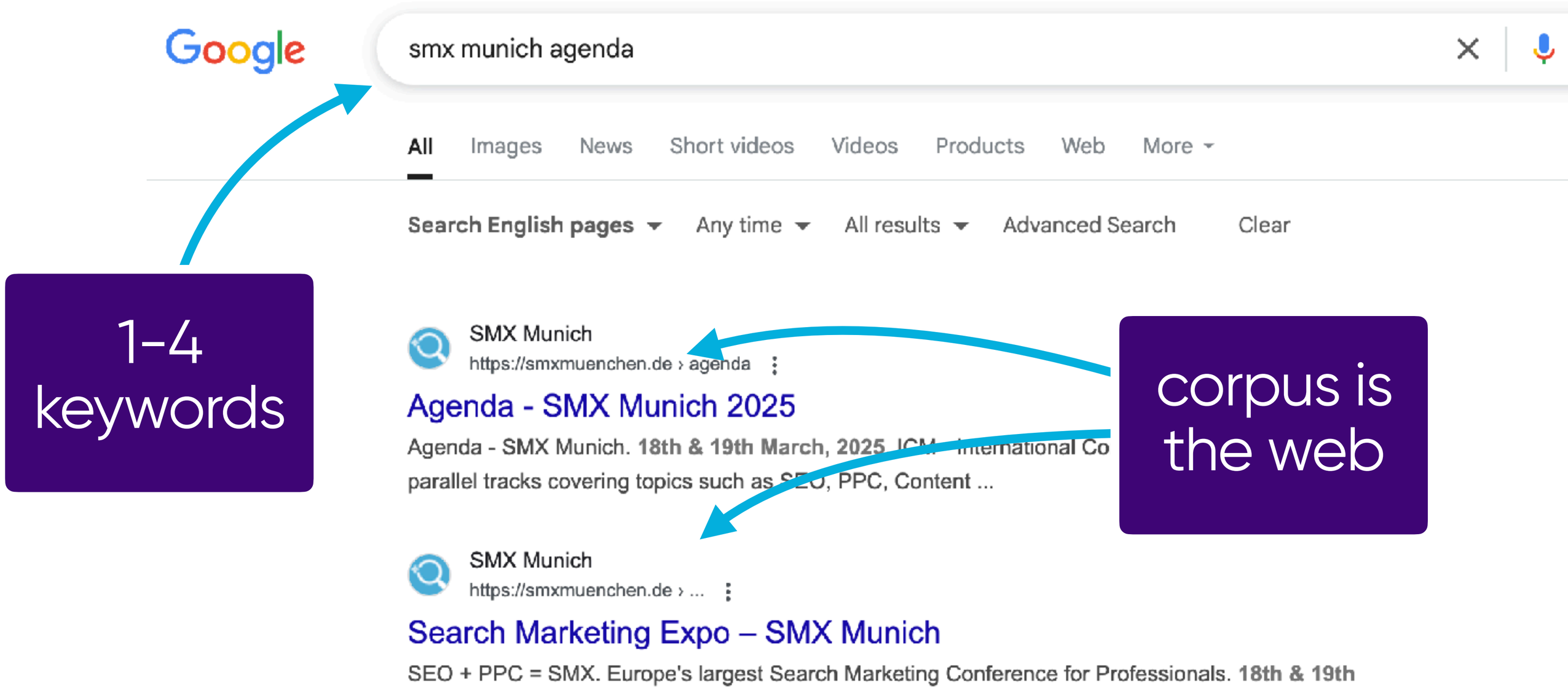


A Typical Google Search

1-4 keywords



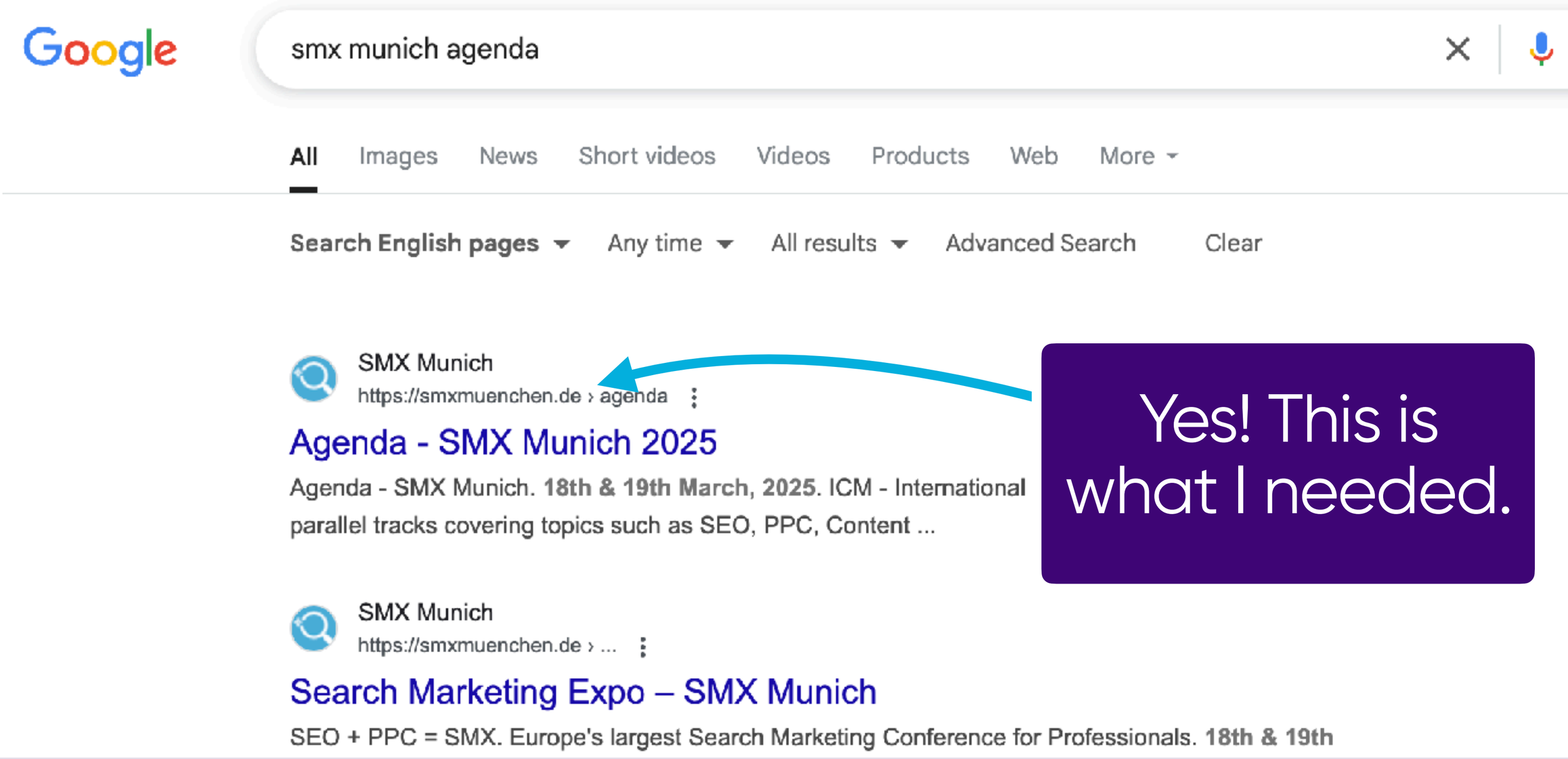
A Typical Google Search



1-4 keywords

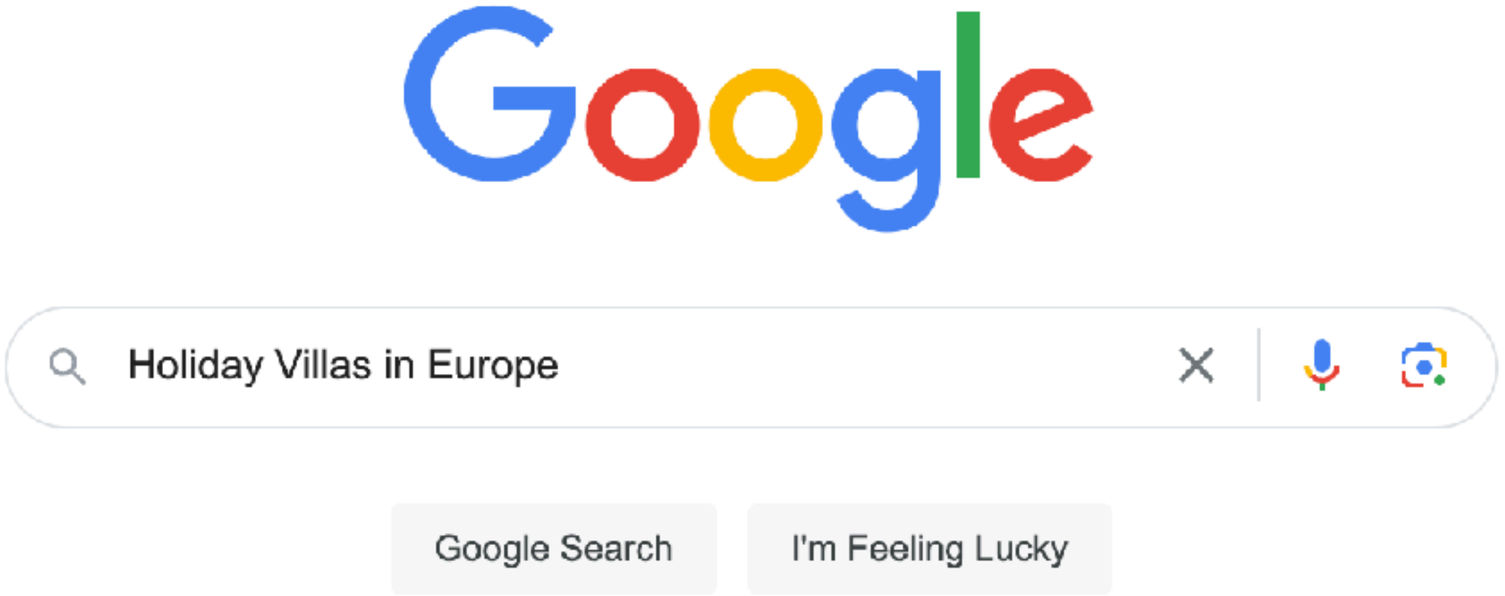
corpus is the web

Single-Shot Search



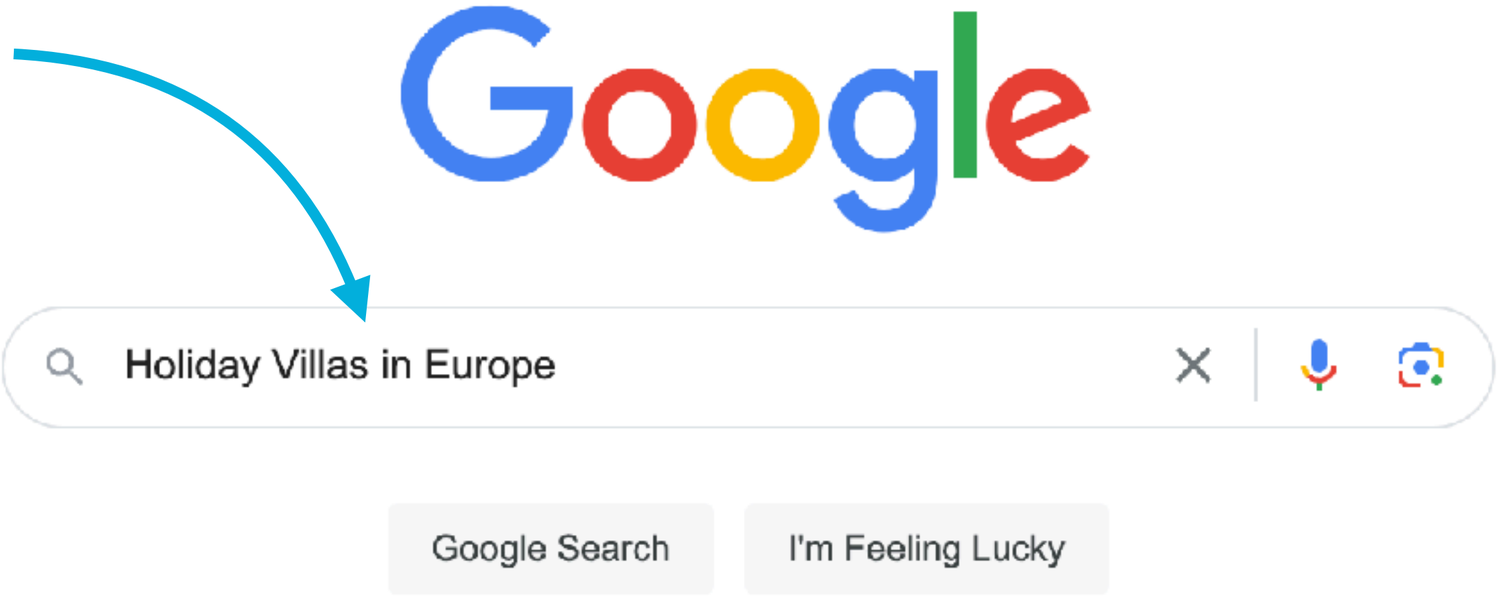
Yes! This is what I needed.

Most searches are not single-shot...



Most searches are not single-shot...

Only some of my criteria



Google search flow...

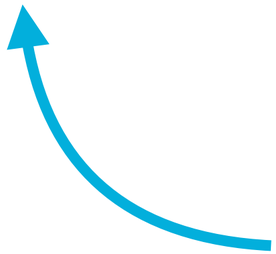
1. Do search on Google.
2.
3.
4.

Google search flow...

1. Do search on Google.
2. Search through results.
3.
4.

Google search flow...

1. Do search on Google.
2. Search through results.
3.
4.



Second phase of the same search.

Post-Search Browsing

1. Do search on Google.
2. Search through results.
3. Do follow-up search on Google.
4.

Post-Search Browsing

1. Do search on Google.
2. Search through results.
3. Do follow-up search on Google.
4. Repeat.

What I wanted to do...

… instead of this!

Holiday 2022

File Edit View Insert Format Data Tools Extensions Help Last edit was seconds ago

J33

	A	C	D	E	F	G	H	I	J	K	L	M	N
1	**Cyprus**												
2		**Dates**	**Beach**	**Restaurant**	**Supermarket**	**Hettyfriendly Pool**	**Airport**	**Comments**		**link**			
3	Villa Marlene	14.08.-28.08.	600m	200m	500m	no (depth 1,5m, no steps)	Paphos (40min)			https://www.jamesvillas.co.uk/destinations/cyprus/coral-bay/marlene-13696?a			
4	Villa Coralia Dream 12	07.08.-21.08.	700m	300m	400m	no (depth 1m-1,65m, no steps)	Paphos (40min)			https://www.jamesvillas.co.uk/destinations/cyprus/coral-bay/coralia-dream-12			
5	Villa Seaside Diana 1	27.08.-10.09.	800m	700m	1,3km	yes (depth 0,9m, steps)	Paphos (1h10min)			https://www.jamesvillas.co.uk/destinations/cyprus/pomos/seaside-diana-1-17			
6	Villa Coralia Dream 2	21.08.-04.09.	600m	300m	300m	maybe (depth 1m-1,65m, steps)	Paphos (40min)			https://www.jamesvillas.co.uk/destinations/cyprus/coral-bay/coralia-dream-2-2			
7	Villa Demitrios Vine	24.08.-07.09.	800m	600m	700m	no (depth 1,2m-1,5m, no steps)	Paphos (40min)			https://www.jamesvillas.co.uk/destinations/cyprus/coral-bay/demitrios-vine-11			
8	Andreas Villa	28.08.-11.09.	300m	800m	1,5km	no (depth 1,5m, no steps)	Paphos (1h10min)			https://www.jamesvillas.co.uk/destinations/cyprus/argaka/andreas-villa-6586			
9	Villa Chrisandria	21.08.-04.09.	1km	1km	1,8km	yes (depth 0,6m-1,7m, steps)	Paphos (1h10min)			https://www.jamesvillas.co.uk/destinations/cyprus/argaka/chrisandria-2492?a			
10	Villa Coralia Dream 1	28.08.-11.09.	600m	300m	300m	maybe (depth 1m-1,65m, steps)	Paphos (40min)			https://www.jamesvillas.co.uk/destinations/cyprus/coral-bay/coralia-dream-1-2			
11	Villa Antigoni	28.08.-11.09.	500m	1km	1km	probably (depth 1m-2m, steps (depends on photo))	Paphos (1h)			https://www.jamesvillas.co.uk/destinations/cyprus/latchi/antigoni-66967adults			
12	Villa Anthia	24.08.-07.09.	700m	600m	700m	no (depth 1m-1,5m, no steps)	Paphos (40min)			https://www.jamesvillas.co.uk/destinations/cyprus/coral-bay/villa-anthia-5281			
13	Villa Fostira	28.08.-11.09.	400m	1km	1km	no (depth 1m-2m, no steps)	Paphos (1h)	BBQ on other side to pool!		https://www.jamesvillas.co.uk/destinations/cyprus/latchi/fostira-2367?adults=2			
14	Villa Chari Mari	10.08-24.08	1,4km			yes				https://www.jamesvillas.co.uk/destinations/cyprus/latchi/chara-mari-1653?adu			
15													
16	**Canary Islands**												
17		**Dates**	**Beach**	**Restaurant**	**Supermarket**	**Hettyfriendly Pool**	**Airport**	**Comments**		**link**			
18	Villa Casa Aurora	29.08.-12.09.	1km	1km	1km	no (depth 1,4m-1,6m, no steps)	Tenerife South (40min)			https://www.jamesvillas.co.uk/destinations/the-canary-islands/tenerife/los-gig			
19	~~Villa Casa Alfred~~	~~11.08.-25.08.~~	~~500m~~	~~400m~~	~~200m~~	~~yes (depth 1,5m-1,6m, steps, ledge?)~~	~~Arrecife (45min)~~	~~Seems to have a study, looks like big ones wo~~		https://www.jamesvillas.co.uk/destinations/the-canary-islands/lanzarote/puert			
20	Apartment 3 Bdr Suite I	28.08.-11.09.	1km	100m	100m	Resort, Kiddy Pool	Tenerife South (30min)	https://www.booking.com/hotel/es/the-terraces		https://www.jamesvillas.co.uk/destinations/the-canary-islands/tenerife/las-ter			
21	Villa Casa Lucia	21.08.-04.09.	1km	400m	200m	yes (depth 0,45m-1,45m, big ledge)	Arrecife (15min)			https://www.jamesvillas.co.uk/destinations/the-canary-islands/lanzarote/puert			
22	Villa Femes	21.08.-04.09.	700m	700m	700m	maybe (depth 1,35m-1,6m, steps)	Arrecife (40min)			https://www.jamesvillas.co.uk/destinations/the-canary-islands/lanzarote/playa			
23	Villa Brenas	28.08.-11.09.	700m	700m	700m	maybe (depth 1,35m-1,6m, steps)	Arrecife (40min)			https://www.jamesvillas.co.uk/destinations/the-canary-islands/lanzarote/playa			
24	Villa Rosa	25.08.-08.09.	1km	500m	500m	no (depth 0,8m-1,6m, no steps)	Arrecife (15min)	meh		https://www.jamesvillas.co.uk/destinations/the-canary-islands/lanzarote/costa			
25	Villa Alicia	27.08.-10.09.	700m	1km	100m	yes (depth 1,2m-1,5m, steps)	Fuerteventura Airport (40min)	meh, Aquapark		https://www.jamesvillas.co.uk/destinations/the-canary-islands/fuerteventura/c			
26	Villa Salina II	27.08.-10.09.	1km	1km	1,5km	no (depth 1,35m, no steps)	Fuerteventura Airport (15min)	meh		https://www.jamesvillas.co.uk/destinations/the-canary-islands/fuerteventura/c			
27													
28													
29	**Portugal**												
30		**Dates**	**Beach**	**Restaurant**	**Supermarket**	**Hettyfriendly Pool**	**Airport**	**Comments**		**link**			
31	Villa Baltin	25.08.-08.09.	1km	200m	1,3km	yes (depth 1,1m-2,2m, fenced off)	Faro (45min)			https://www.jamesvillas.co.uk/destinations/portugal/algarve/castelo/baltin-134			

Bluesky: TomAnthony

I didn't trust Google to handle this...

Google Era

1.

2.

3.

Google Era

1. Only **one corpus**: the web.

2.

3.

Google Era

1. Only **one corpus**: the web.

2. Searches fulfilled **one query** at a time.

3.

Google Era

1. Only **one corpus**: the web.

2. Searches fulfilled **one query** at a time.

3. Results are primarily **links to websites**.

1

The Google Era

2

5 Years Ago: LLMs

3

5 Years Ago: Mobile Traffic

4

Takeaways

1

The
Google Era

2

5 Years Ago:
LLMs

3

5 Years Ago:
Mobile Traffic

4

Takeaways

2

LLMs Are More Than Chat

LLMs diminish Google's search advantage.

5 years ago: GPT-3 released

June 11, 2020 Product

OpenAI API

We're releasing an API for accessing new AI models developed by OpenAI.

Sign up ↗ Explore the API >

LLMs Impact on **Search** Is More Than **Chat**

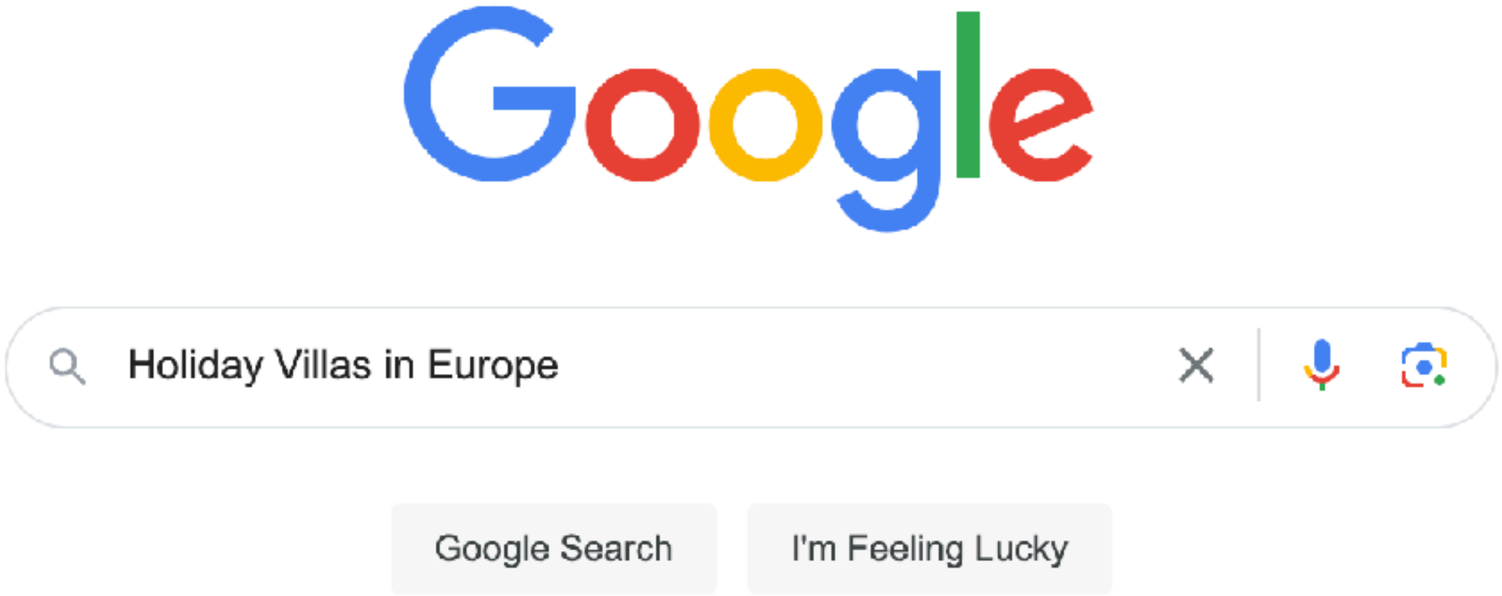
Impact understanding both
search queries & web content.

LLMs Eat Away at Google's Lead in Search

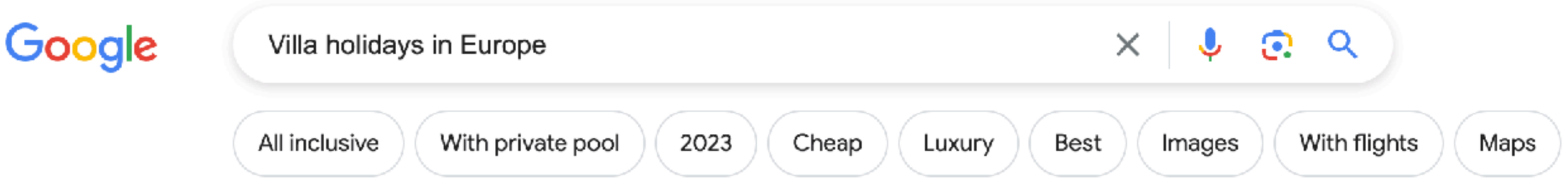
1. For **25 years** we've entered **1-4 keywords**.

2.

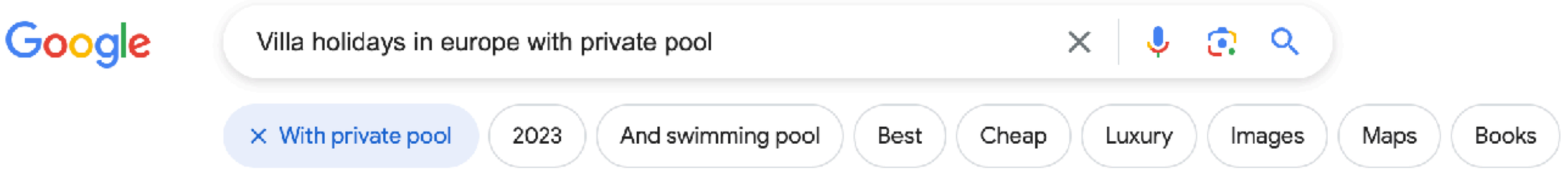
Typically: 1-4 Keywords



Google now trying to retrain us...

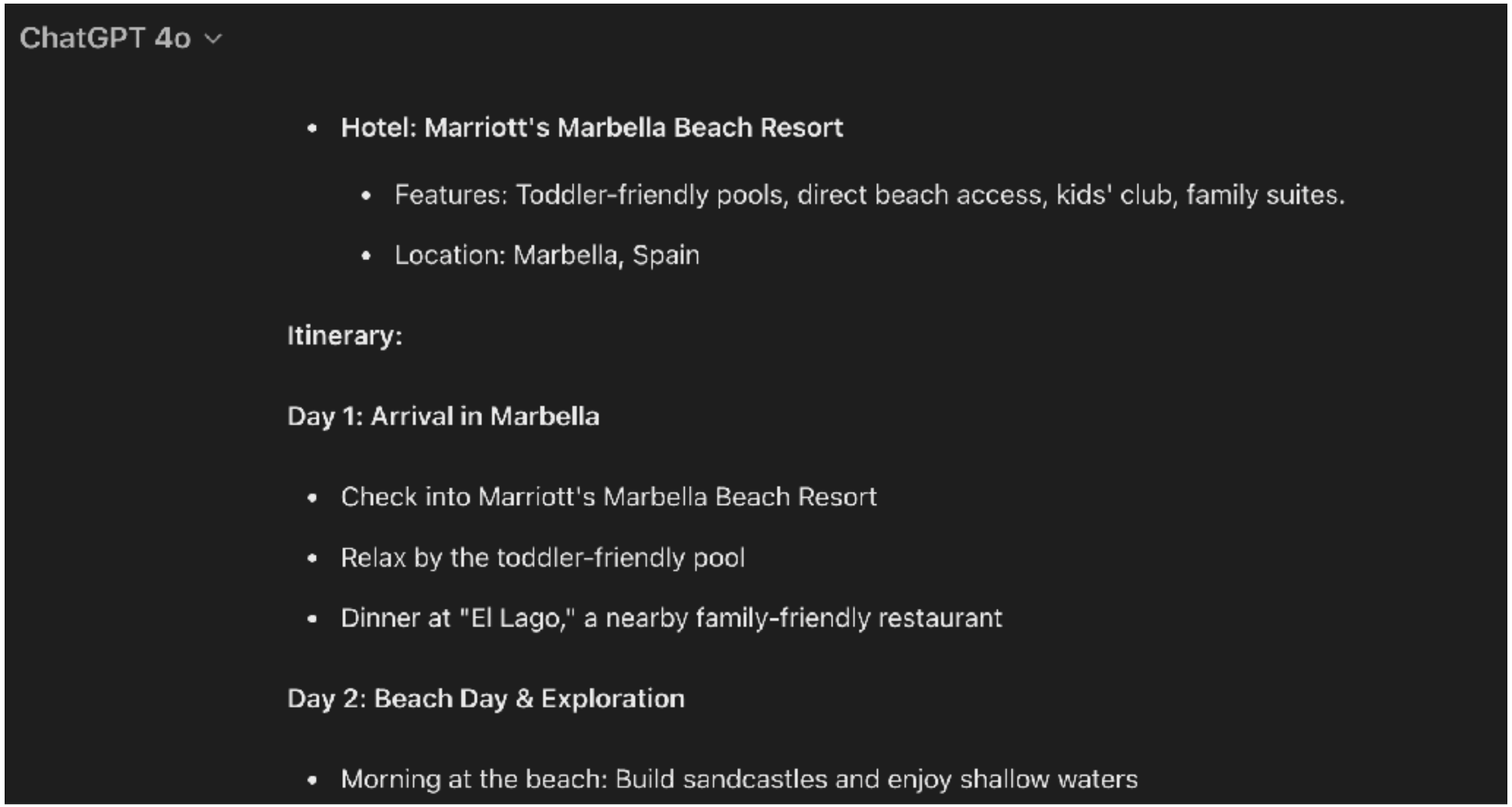


Google now trying to retrain us...



So Google not trained for this query...

LLMs understand the query much better...



...but have lacked the realtime data to answer.

LLMs Understand Complex **Search Queries** Better

Google's lead in understanding
search queries is diminished.

LLMs Eat Away at Google's Lead in Search

1. For **25 years** we've entered **1-4 keywords**.

2. **LLMs** compete with Google's **semantic models**.

Knowledge Graph

Google

Alexander Bain fax

All Images Videos Places Place sites News Products More Tools

The first fax machine was invented by Scottish mechanic and inventor Alexander Bain. In 1843, Alexander Bain received a British patent for "improvements in producing and regulating electric currents and improvements in timepieces and in electric printing and signal telegraphs", in laymen's terms a fax machine. 20 Mar 2019

ThoughtCo
https://www.thoughtco.com › ... › Famous Inventions

Alexander Bain and the First Fax - ThoughtCo

About featured snippets • Feedback

Wikipedia
https://en.wikipedia.org › wiki › Alexander_Bain_(inven...

Alexander Bain (inventor)

Bain worked on an experimental fax machine from 1843 to 1846. He used a clock to synchronise the movement of two pendulums for line-by-line scanning of a ...

People also ask

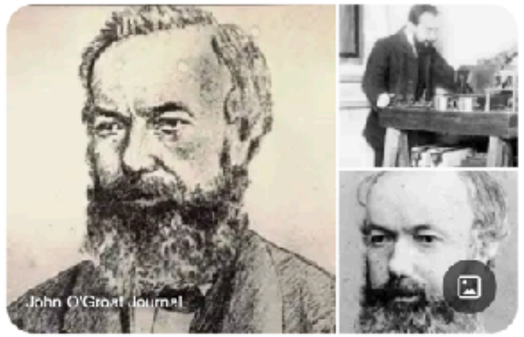
Who is the real inventor of the fax machine?

How did Alexander Bain invent the fax machine?

How did the 1843 fax machine work?

Alexander Bain

Inventor and engineer



Alexander Bain was a Scottish inventor and engineer who was first to invent and patent the electric clock. He installed the railway telegraph lines between Edinburgh and Glasgow. Wikipedia ›

Born
October 1810
Watten, United Kingdom

Died
2 Jan 1877
Kirkintilloch, United Kingdom

Born: October 1810, Watten, United Kingdom

Resting place: Auld Aisle Cemetery, Kirkintilloch, Scotland

Structured Markup

Apartment Zedna

Trogir in Split Region

6 2 2 PRIVATE FREE A/C ADVISED FREE WI-FI

```
"address": {
  "@type": "PostalAddress",
  "addressCountry": "HR",
  "addressLocality": "Trogir",
  "addressRegion": "Split",
},
"photo": "https://i.jamesvillas.co.uk/images/galleries/21splitregion/villas/photos/211e615c053c
"numberOfRooms": 3,
"amenityFeature": {
  "@type": "LocationFeatureSpecification",
```

schema.org has:

1,400

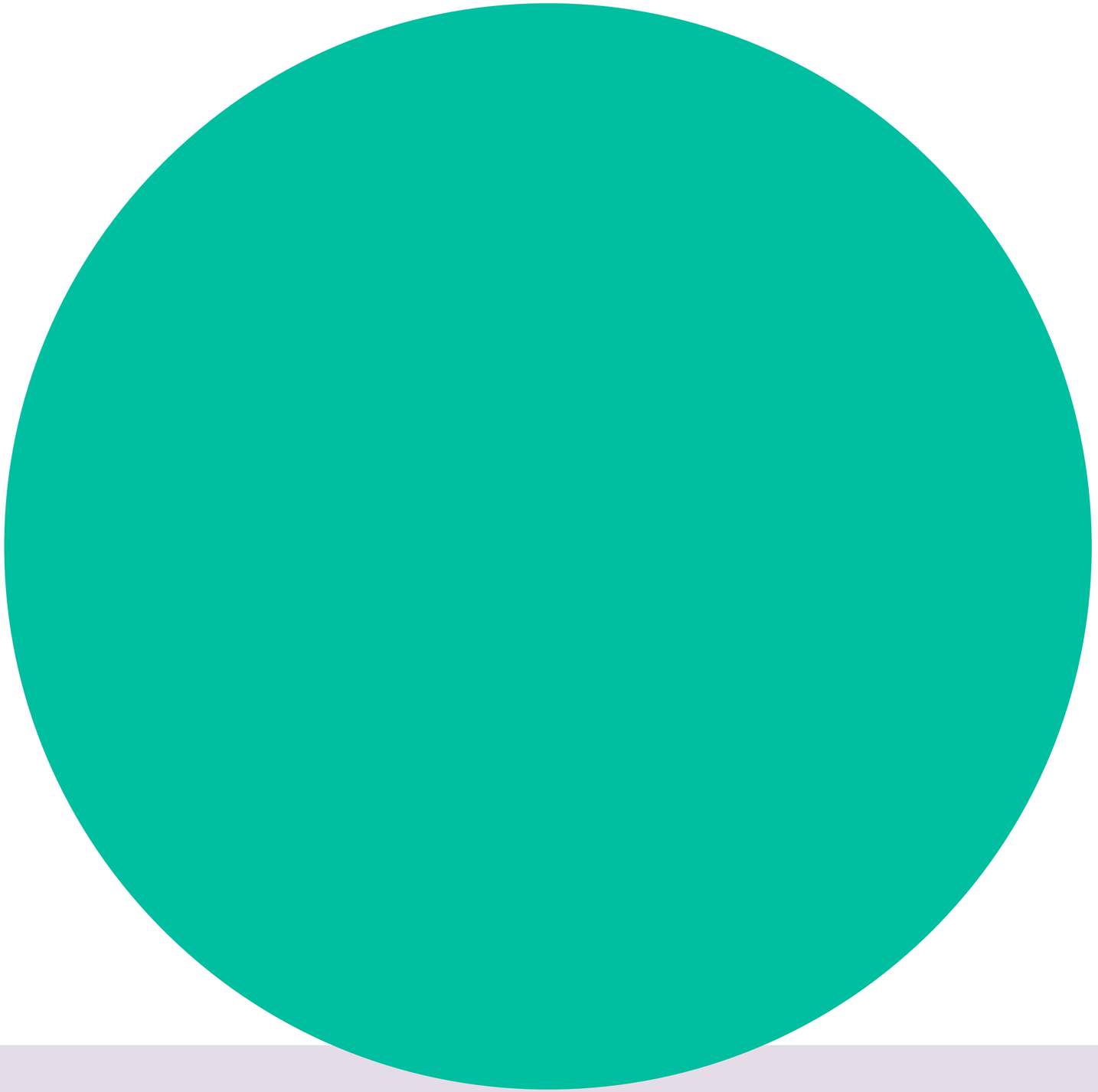
types

GPT4 has:

100,000,000,000

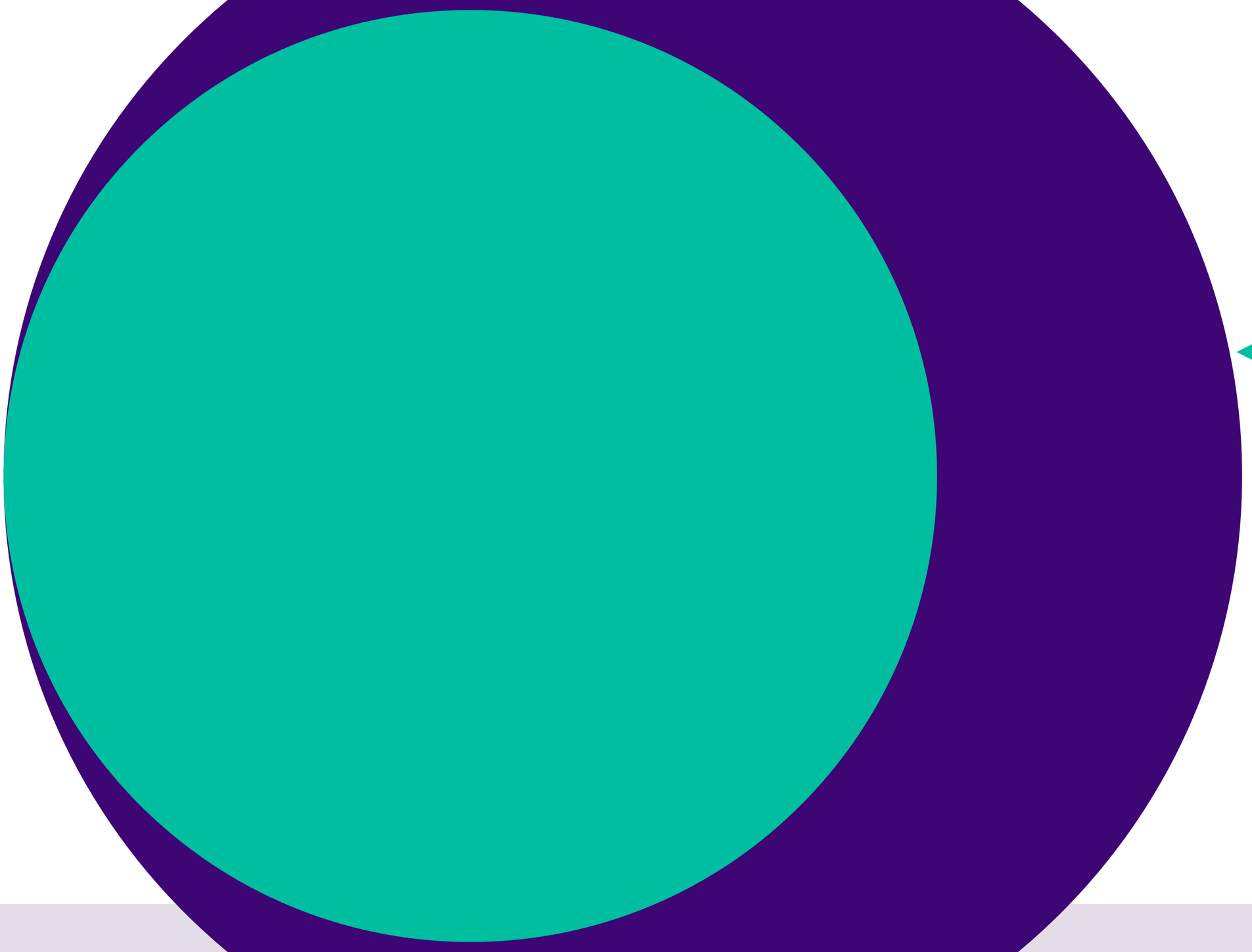
neurons

schema.org



GPT4

schema.org



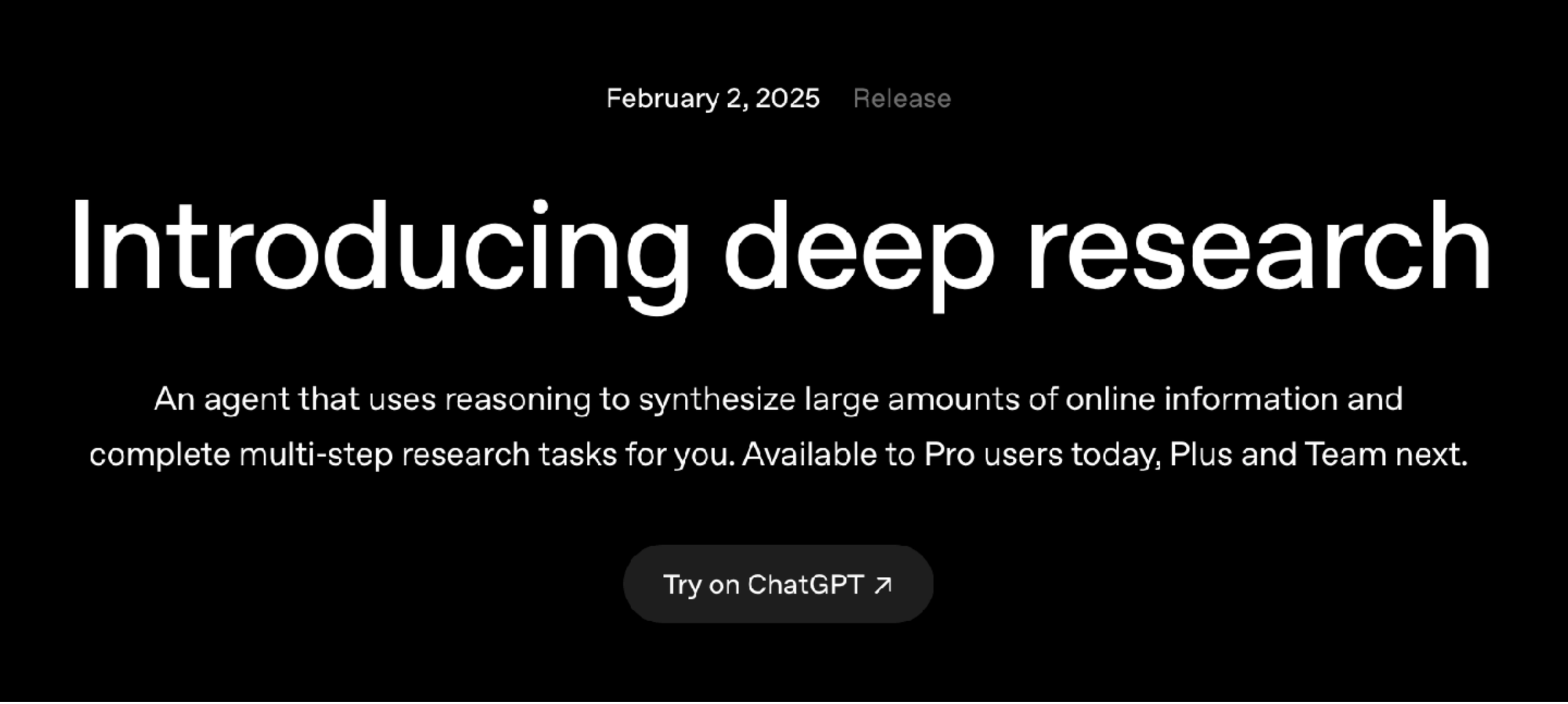
01

LLMs Excel at **Semantic** Understanding of **Web Content**

This has nothing to do with the
‘generative’ part of Generative AI.

Post-Search Browsing

1. Do search on Google.
2. Search through results.
3. Do follow-up search on Google.
4. Repeat.



In the last 3 months - ‘deep research’ has come onto the scene.

Deep Research

Show me holiday itineraries for a family of 5, with a toddler friendly pool and near the beach & some restaurants, in or near Europe.

That sounds like a great trip! Could you share a few more details so I can tailor the itinerary to your needs?

- Preferred countries or regions in or near Europe?
- Desired trip duration (e.g., a weekend, one week, two weeks)?
- Budget range (luxury, mid-range, budget)?
- Time of year you plan to travel?
- Any specific activities or attractions you'd like to include (e.g., water parks, cultural sites, nature excursions)?

Deep Research

Research completed in 9m · 21 sources

Family Beach & Culture Summer Itinerary (9 Days from Munich)

Deep Research

Research completed in 9m · 21 sources

Family Beach & Culture Summer Itinerary (9 Days from Munich)

Deep Research

Day 6: Splash Day at Istralandia Water Park

By Day 6, the kids (and kids-at-heart) will be eager for some high-energy fun – it's the perfect time to hit a **water park**! Drive about 1 hour north to **Aquapark Istralandia**, one of Croatia's best water parks. In fact, Istralandia has been ranked the **"second best water park in Europe,"** known for its huge variety of slides and pools ISTRA.HR. The park features **23 different slides** (from safe, small slides for little ones to big adrenalin

istra.hr

Istralandia Aquapark | Water parks in Istria

Experience a refreshing adventure at the second best water park in Europe and treat yourself an...

e **largest wave pool in this part of Europe** ISTRA.HR. Pl ab a nice spot with shade as your base. The 13-year-ol ger two can start at the kid splash zones – there are s Mom and Dad can join in the tube rides or float together in the lazy river. The park has lifeguards throughout, but always keep an eye on your 6-year-old, especially in wave pools. Around lunchtime, take a break at the on-site

Search Paradigm Shift:

Move From **Iterative** Single-Step Queries to **Multi-Step**

This breaks the ‘bots crawl’
and ‘users browse’ paradigm.

Search Paradigm Shift:

Search Results Are **Selected by the LLM.**

Getting selected is more important
than where you rank!

1

The
Google Era

2

5 Years Ago:
LLMs

3

5 Years Ago:
Mobile Traffic

4

Takeaways

1

The Google Era

2

5 Years Ago: LLMs

3

5 Years Ago: Mobile Traffic

4

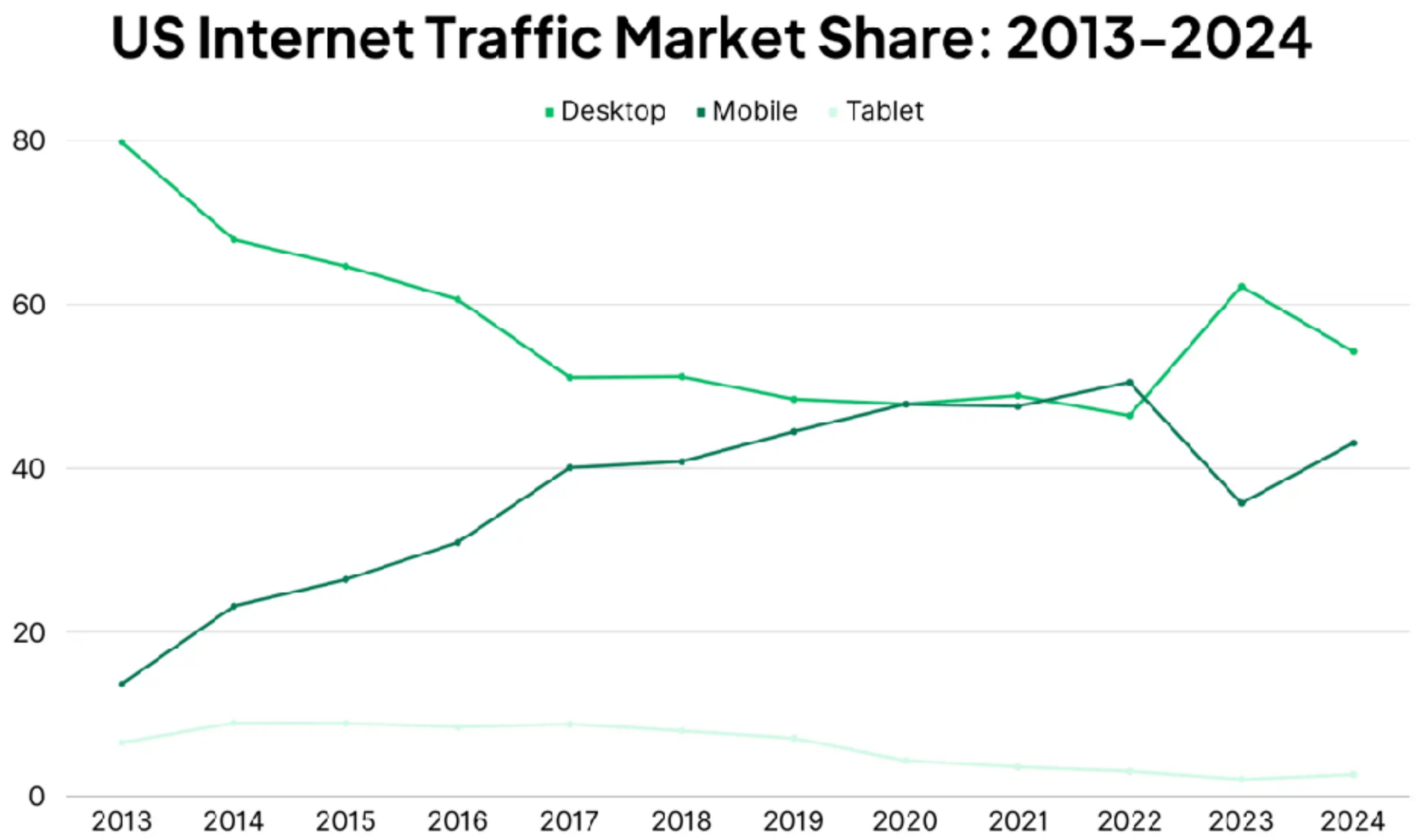
Takeaways

3

Apps Overtook the Web

Search should be where the traffic is.

5 years ago: Mobile overtook Desktop



Source: mobiloud.com

Google was born in this time...

Device

Browser

Web

Google lives here

Device

Browser

Web

Device

Recipe Keeper

Facebook

Browser

WhatsApp

Mail

Recipes

Social

Web

Messages

Emails

Search belongs here

Device

Recipe Keeper

Facebook

Browser

WhatsApp

Mail

Recipes

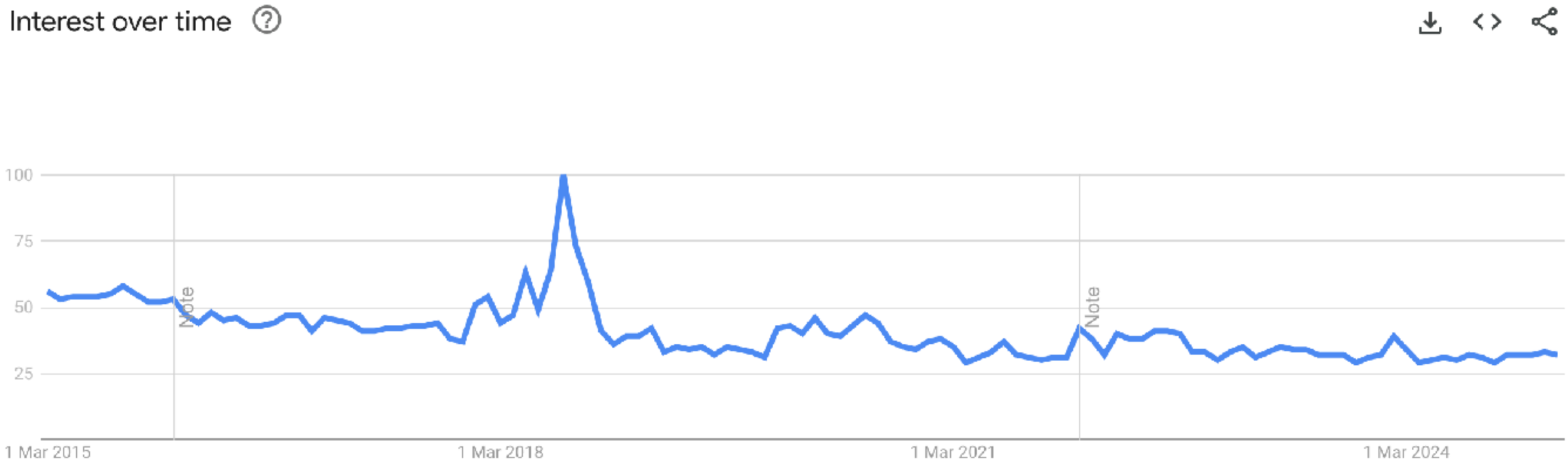
Social

Web

Messages

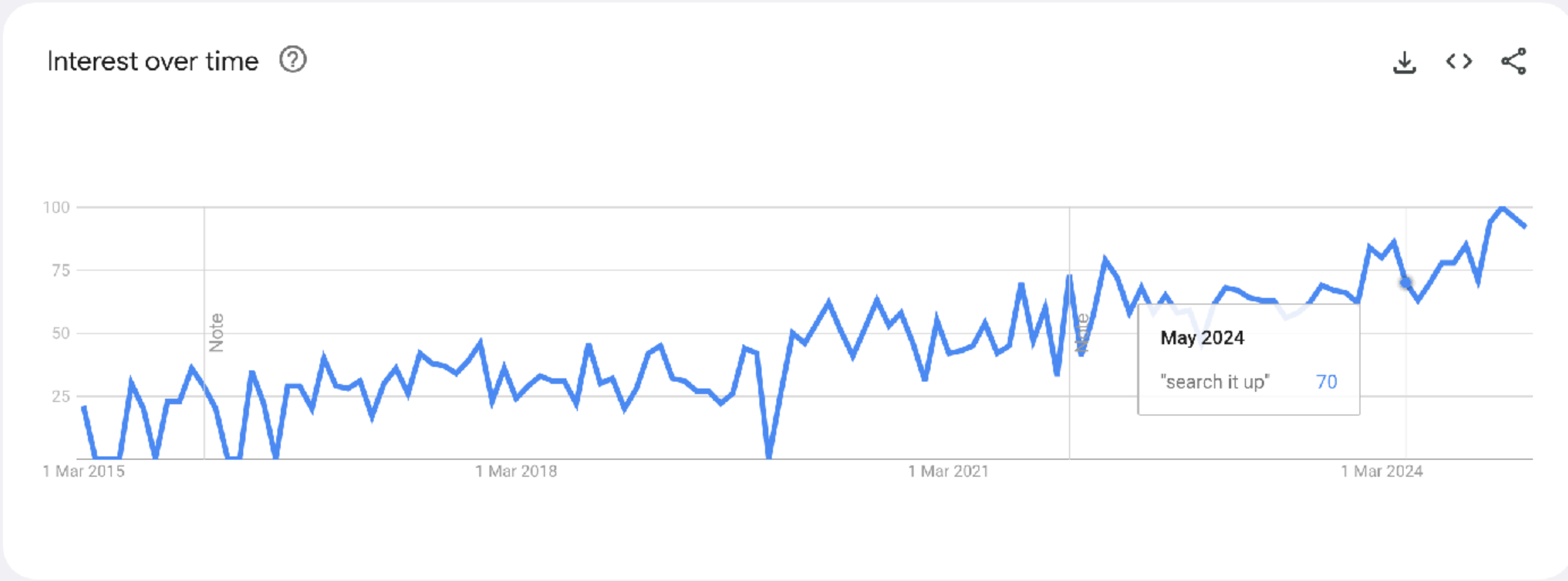
Emails

‘Google it’



Gen Alpha don’t say ‘Google it’

‘Search it up’



They say ‘search it up’... They don’t assume Google.

Mathilda, 13
Philippa, 10
Hetty, 6

Mathilda, 13

- Doesn’t say ‘google it’!
- Uses ChatGPT a lot.
- Uses Google for online shopping.

Mathilda, 13

- Doesn’t say ‘google it’!
- Uses ChatGPT a lot.
- Uses Google for online shopping.

Already spending money on your websites.

Hetty, 6

- Still learning to read, but...
- Searches regularly by voice.
- Uses Siri + Alexa

Hetty, 6

- Still learning to read, but...
- Searches regularly by voice.
- Uses Siri + Alexa

Will she ever revert to 'keywords' over natural language?

Philippa, 10

SMX Munich March 2022: Prediction

A home screen search field to change how people search.

Move away from ‘web search’ as the default.

Search belongs here

Device

Recipe Keeper

Facebook

Browser

WhatsApp

Mail

Recipes

Social

Web

Messages

Emails

June 2022: Added Search Field in iOS 16

June 2022: Added Search Field in iOS 16

Philippa, 10

- Often uses the iOS ‘search’ field.
- Alexa for informational queries.
- Uses Google infrequently.

Philippa, 10

- Often uses the iOS ‘search’ field.
- Alexa for informational queries.
- Uses Google infrequently.

Will be online shopping within 1-2 years.

Generation of Searchers who don’t start in **Google**

?

So what could an Apple Search Engine look like?

2,000,000
Apps available

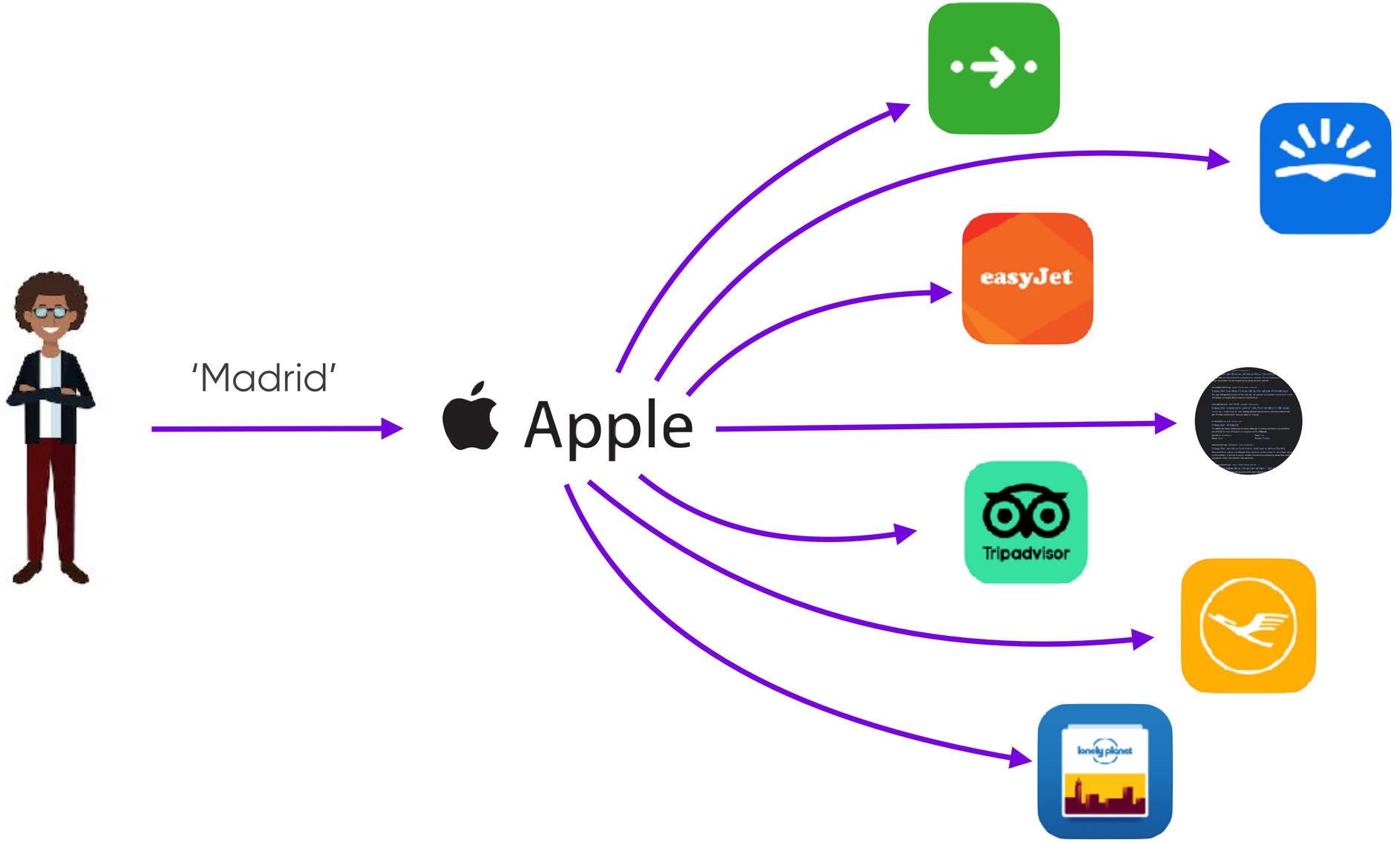
Running a Google search

‘Madrid’

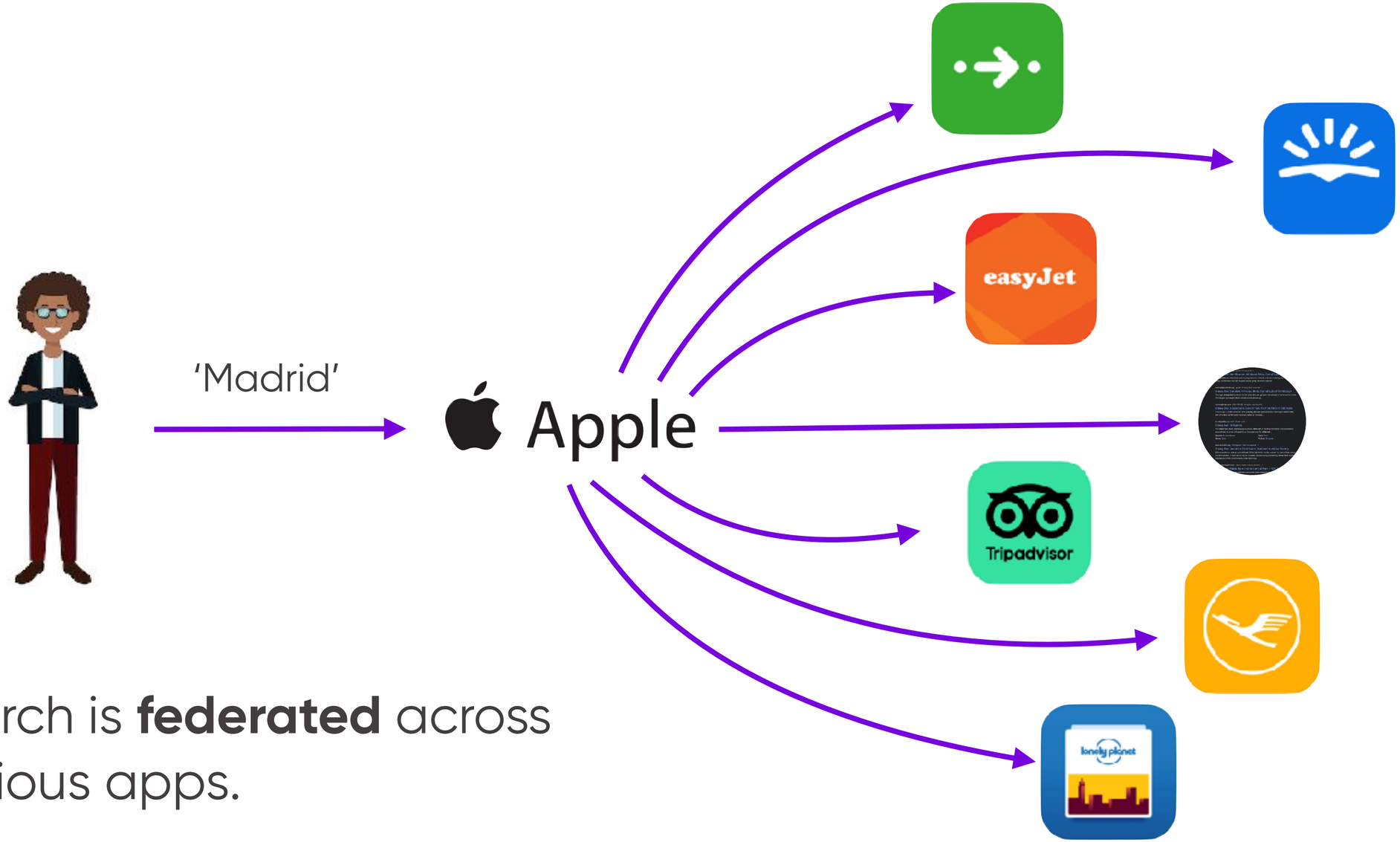
Google

Primarily a web search (supplemented with other sources for some queries).
A single database.

Running an Apple search

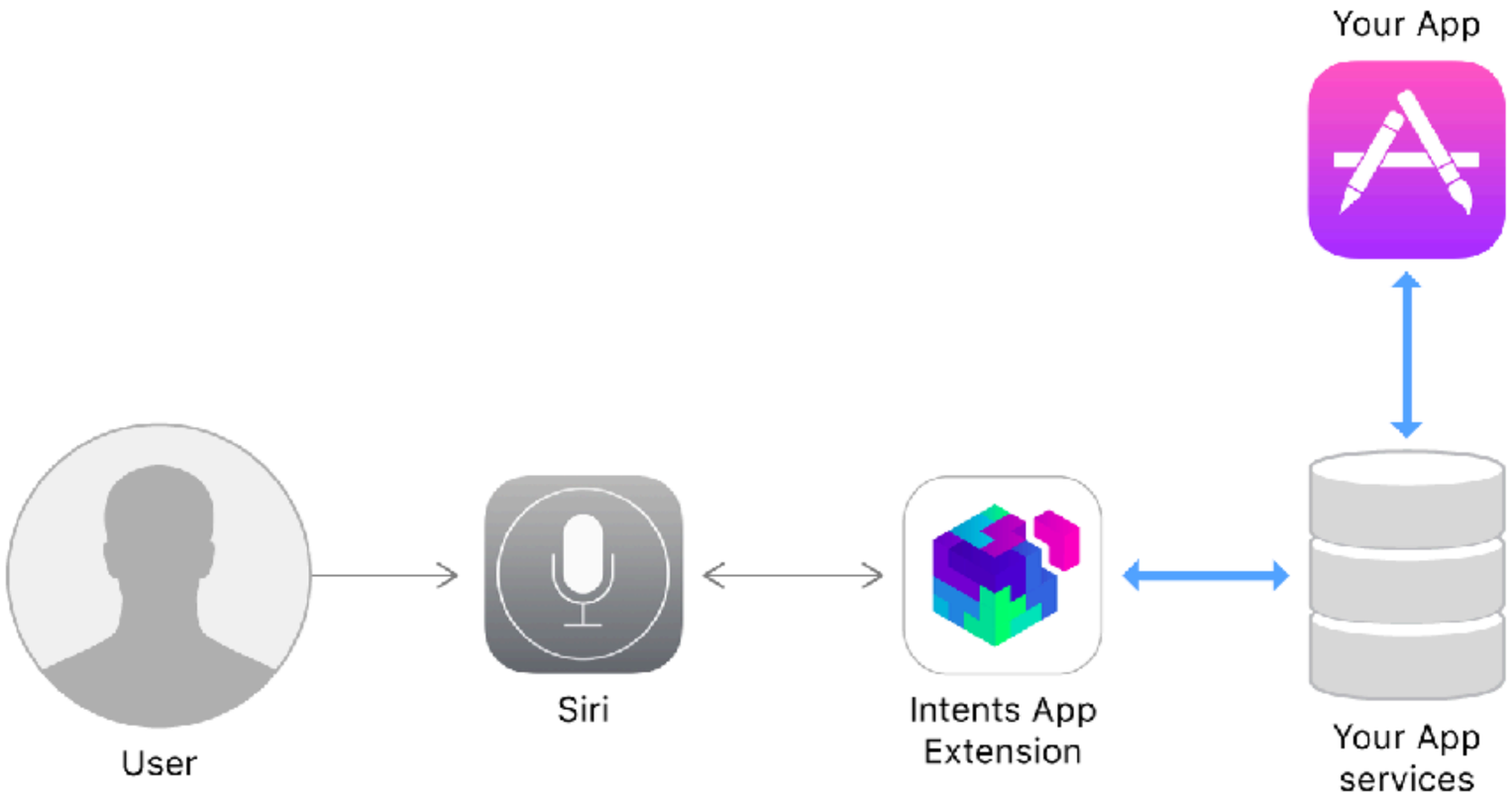


Running an Apple search

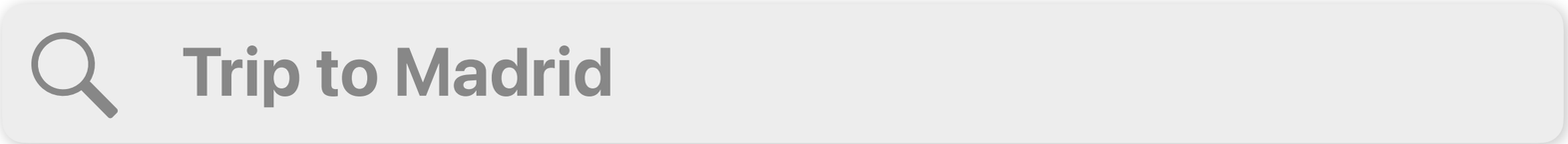


Every search is **federated** across many various apps.

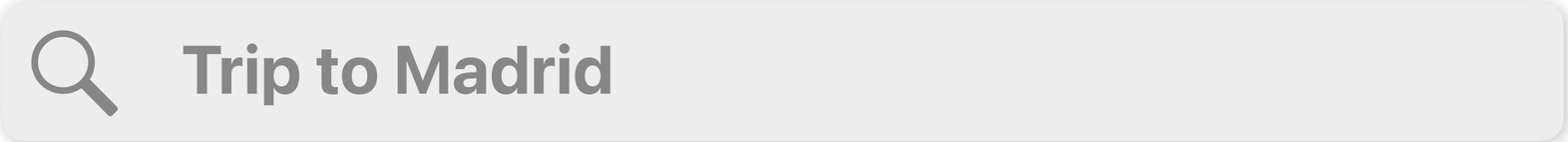
Apps can advertise **Intents**



So imagine you run a search...

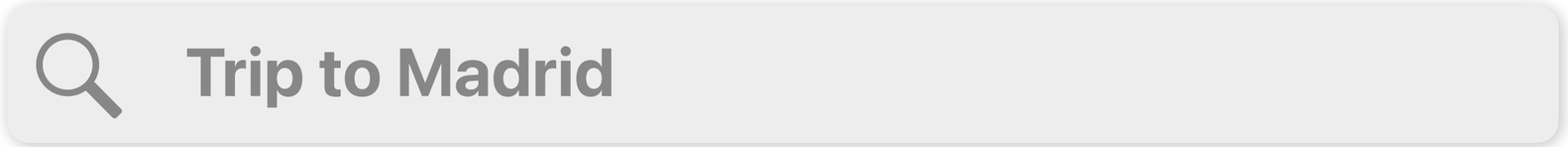


Phone determines your intent(s)...



```
{intent: book flight,
 parameters: madrid}
```

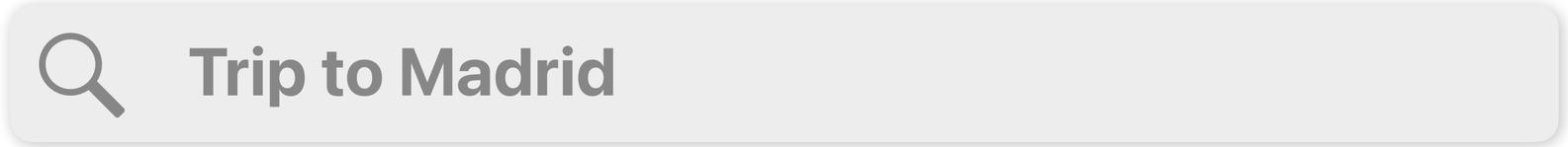
Phone determines your intent(s)...



```
{intent: book hotel,
 parameters: madrid}
```

```
{intent: book flight,
 parameters: madrid}
```

Phone determines your intent(s)...

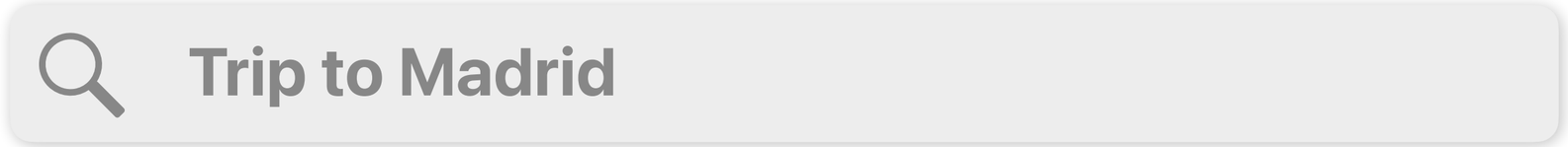


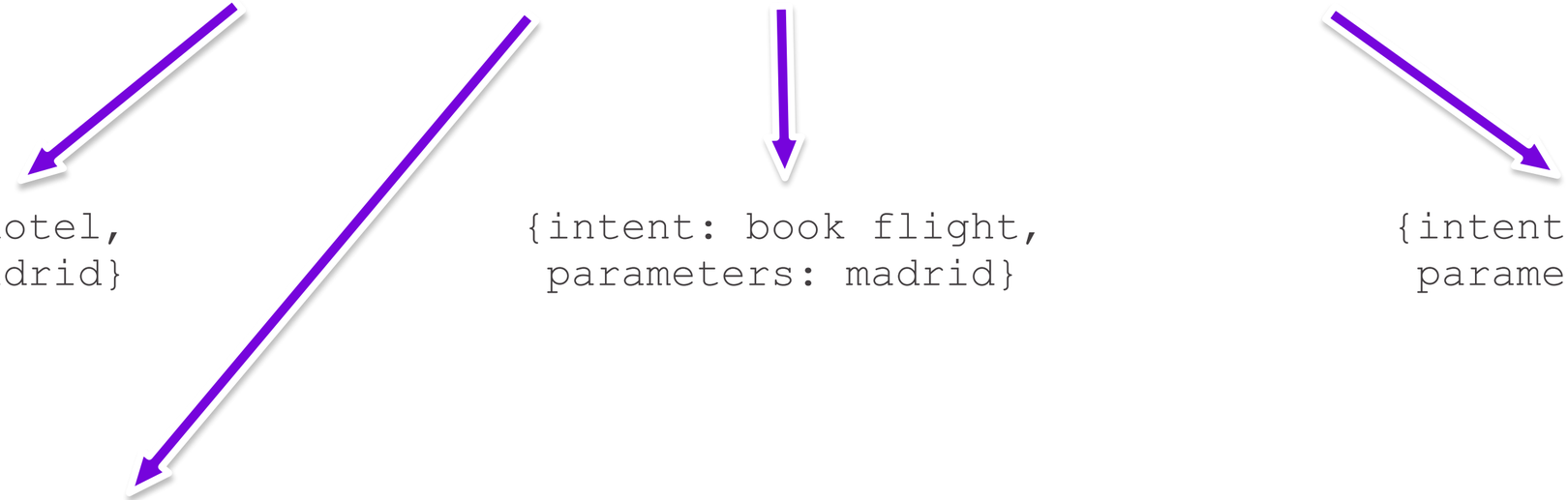

```
{intent: book hotel,
 parameters: madrid}
```

```
{intent: book flight,
 parameters: madrid}
```

```
{intent: learn language,
 parameters: spanish}
```

Phone determines your intent(s)...





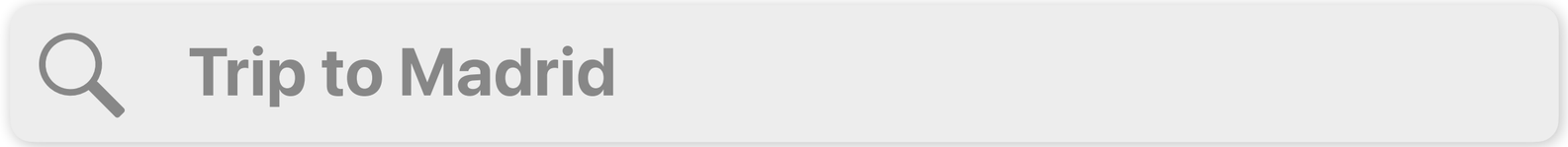
```
{intent: book hotel,
 parameters: madrid}
```

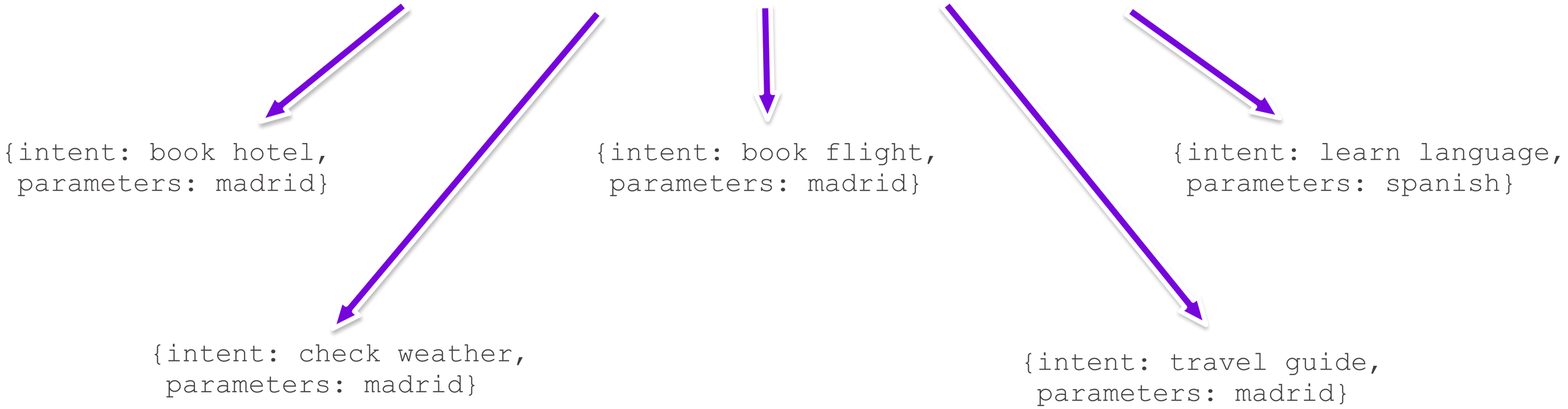
```
{intent: book flight,
 parameters: madrid}
```

```
{intent: learn language,
 parameters: spanish}
```

```
{intent: check weather,
 parameters: madrid}
```

Phone determines your intent(s)...





...apps serve those Intents.

...apps serve those Intents.

Trip to Madrid

{intent: book hotel,
parameters: madrid}

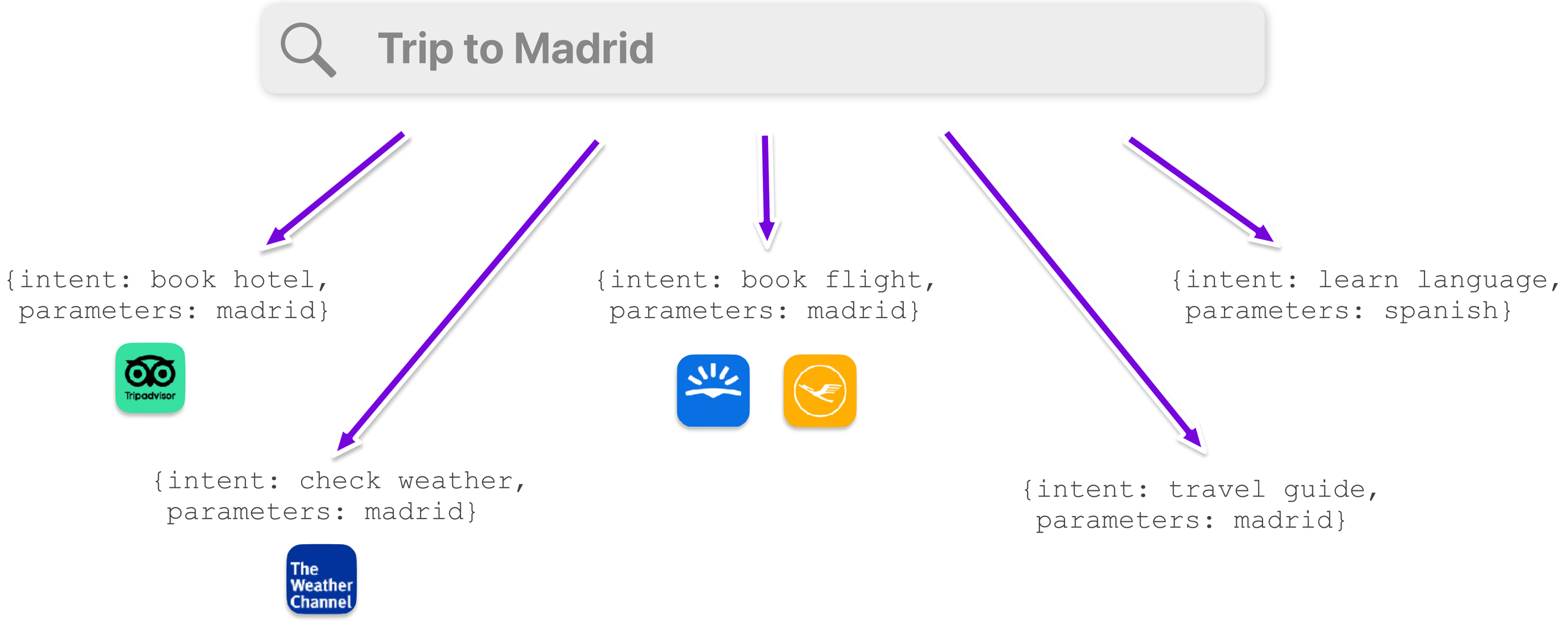
{intent: check weather,
parameters: madrid}

{intent: book flight,
parameters: madrid}

{intent: travel guide,
parameters: madrid}

{intent: learn language,
parameters: spanish}

...apps serve those Intents.



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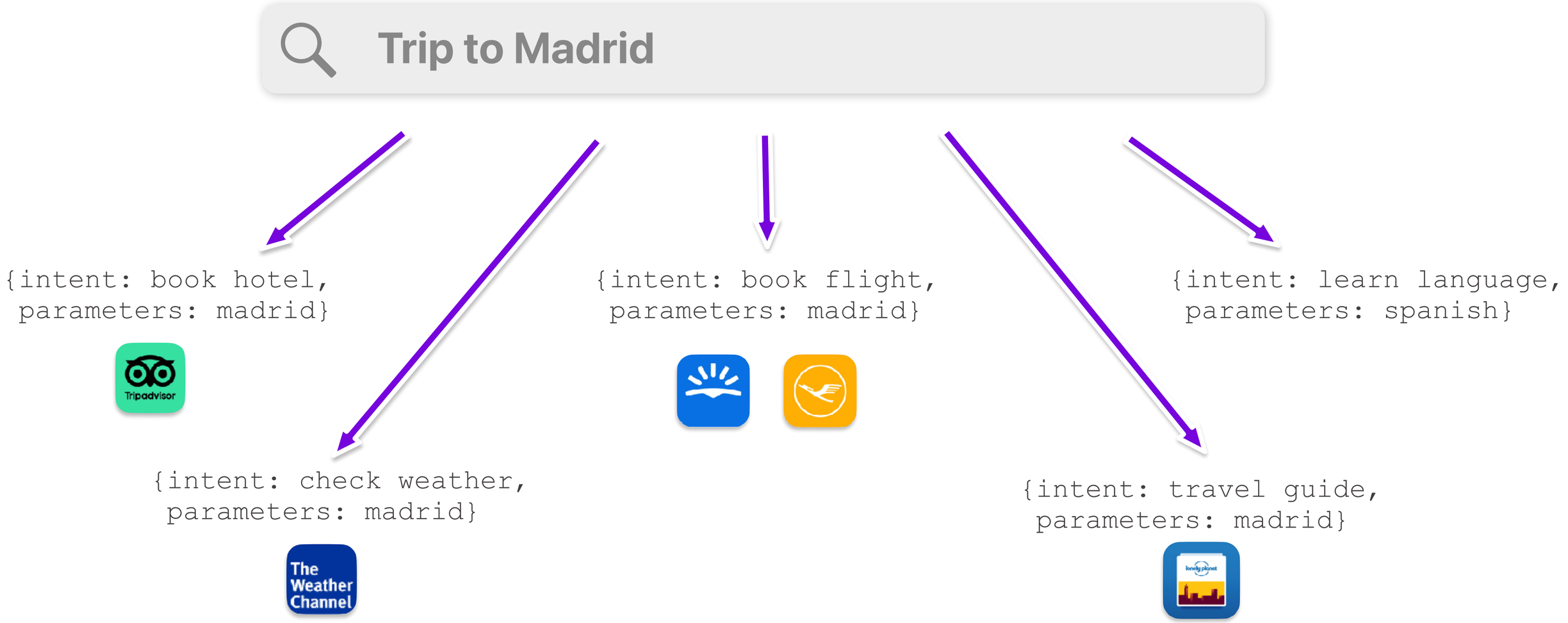

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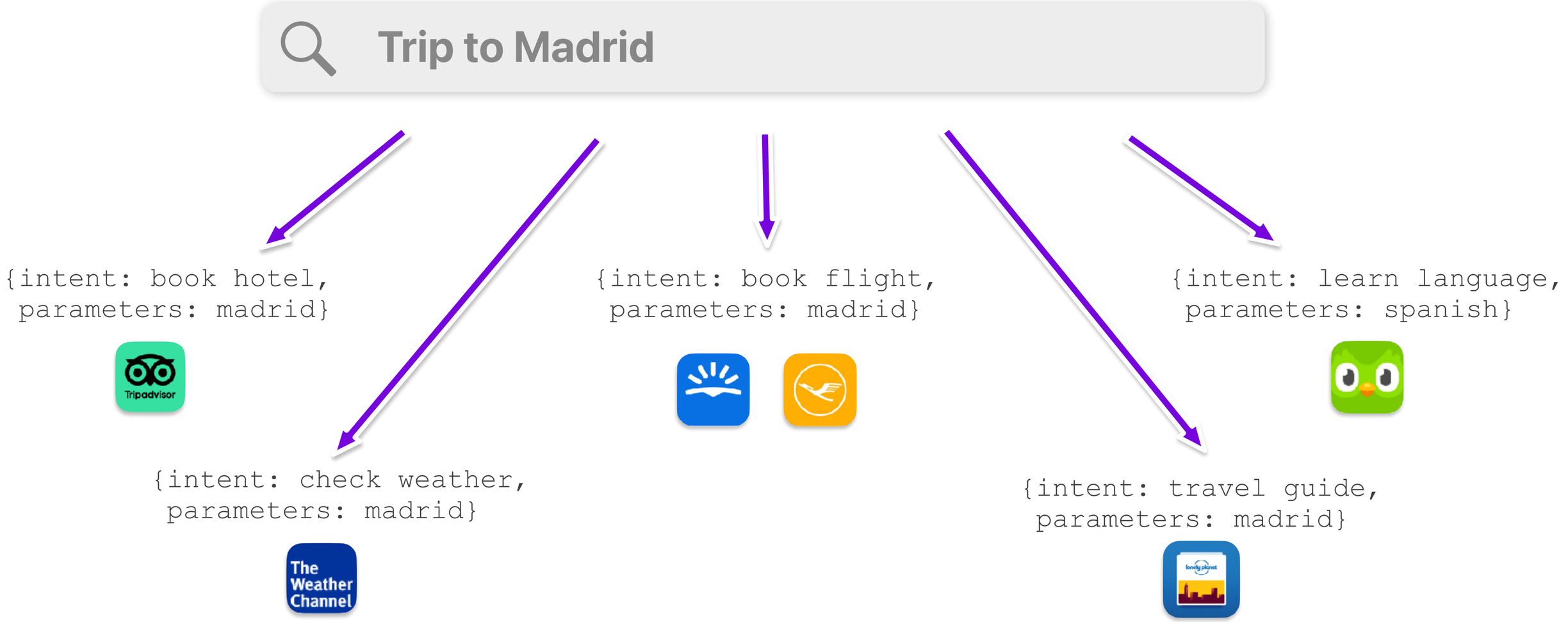

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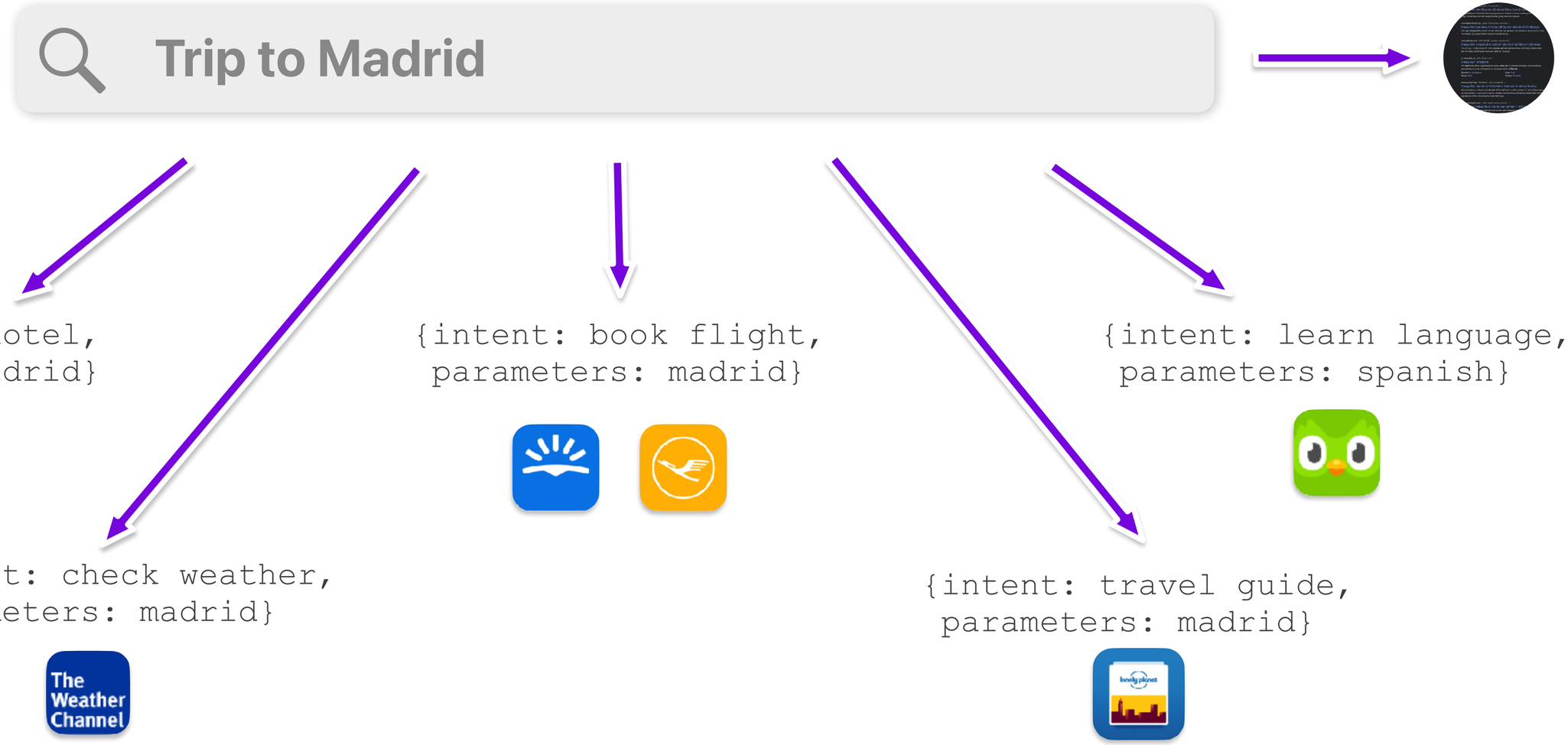


Apple Can Serve Many of the **Same Intents** via Apps

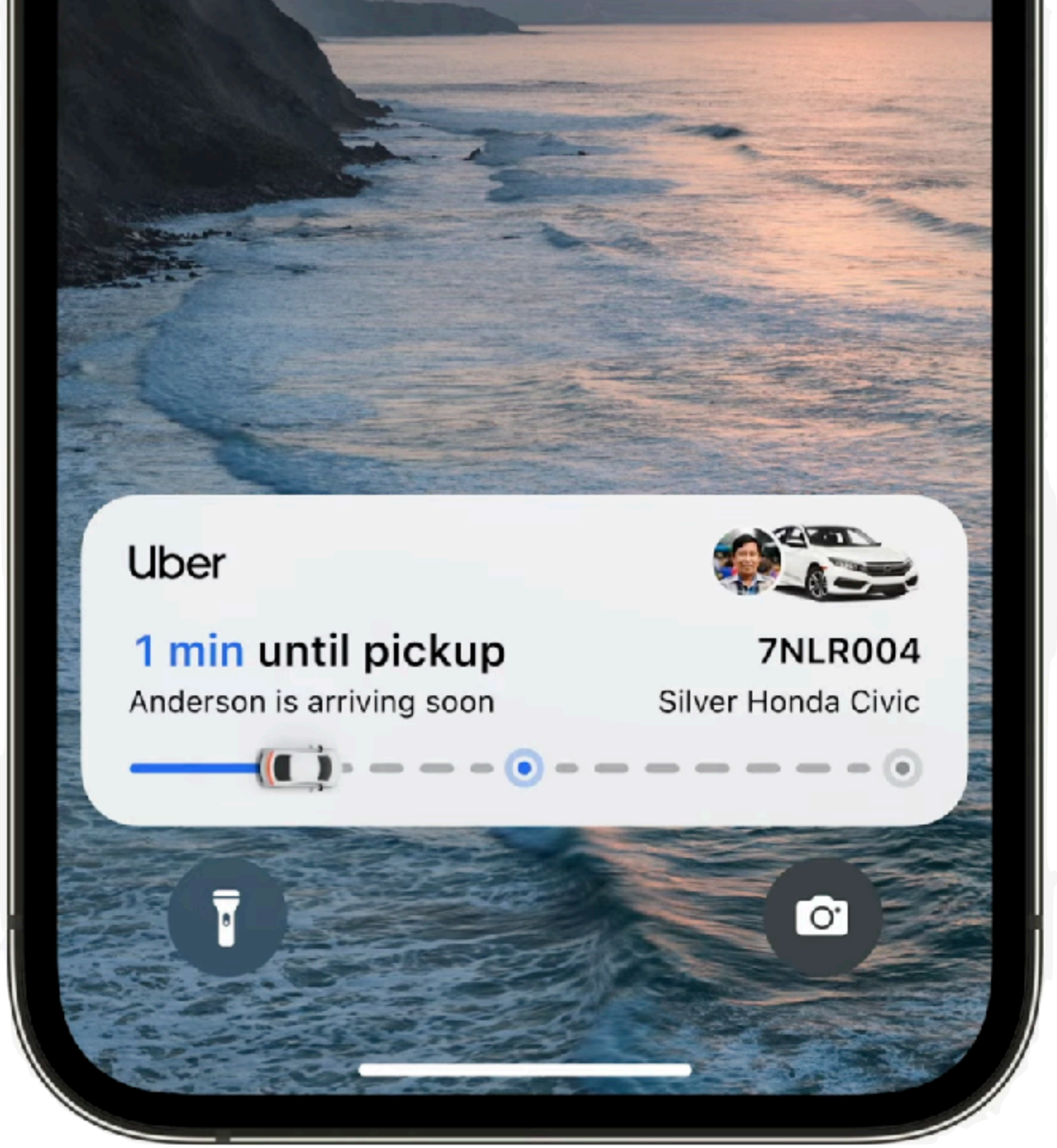
Their Web Index Need Only Be **Good Enough**

Federated Results Are **Realtime**

Web Results May Be **Old**

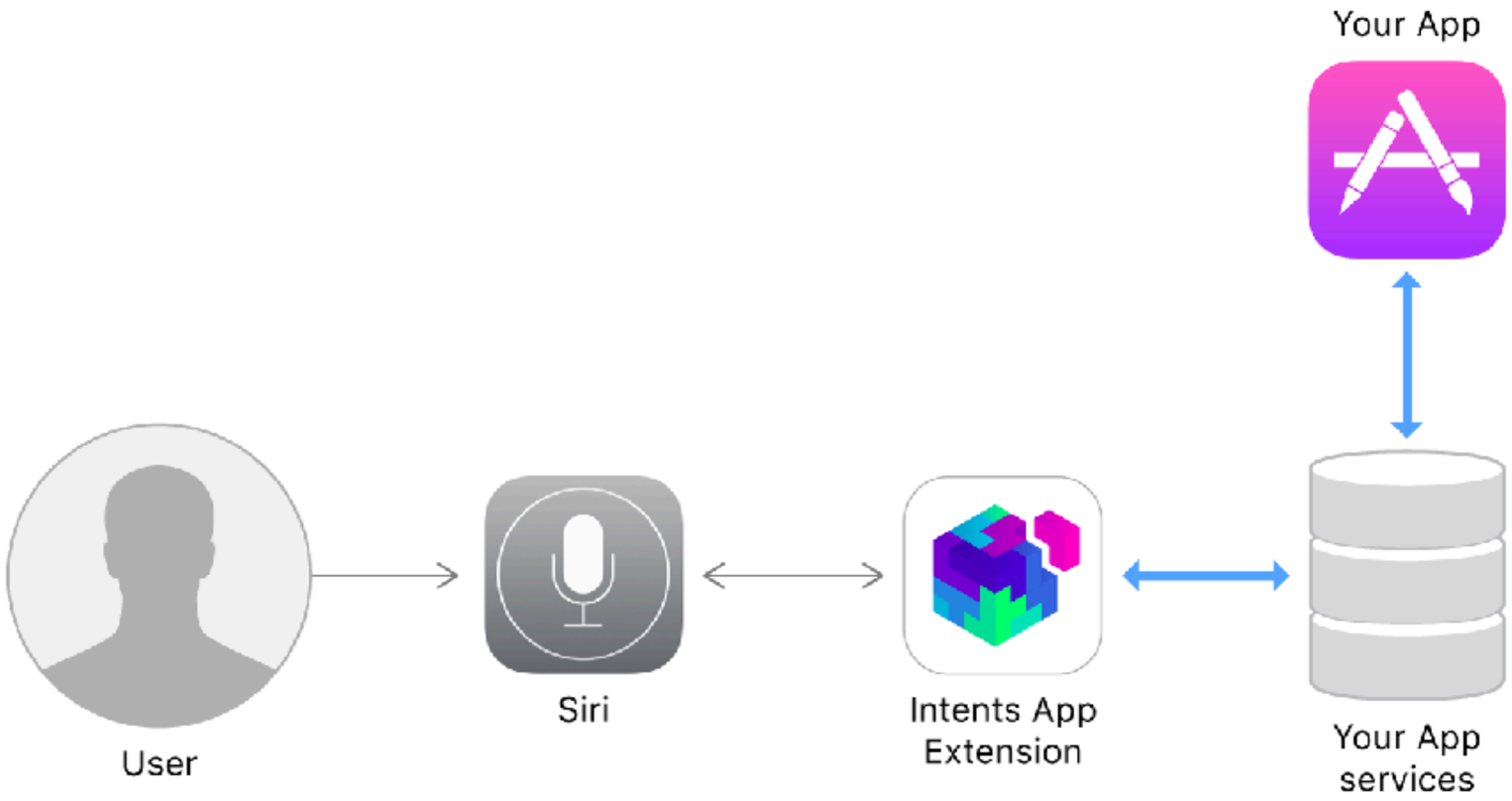
Non-Web Results

"How can I get to Messe München?"



App Clips (launched Sep 2020)

Earlier: Mapping intents to apps on your phone

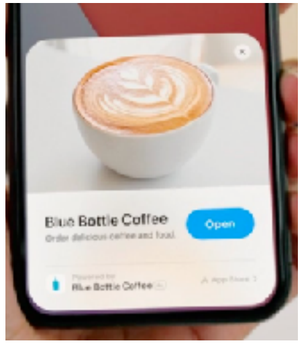


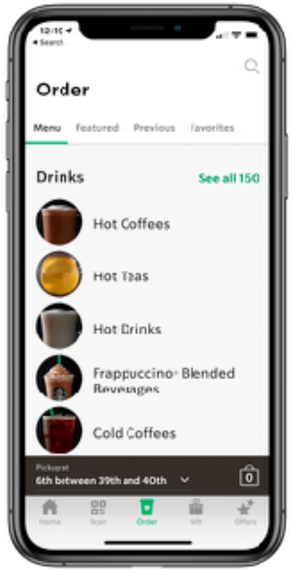
App Clips extend that to any app...

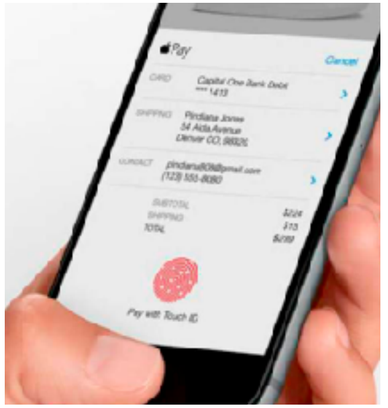
An intent can be mapped to available App Clips in Apple's **Intent Index**.

Device Native: Apple Pay + Sign in with Apple

End to End Example: Coffee Order

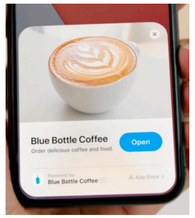


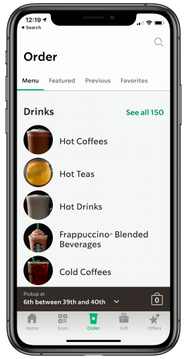


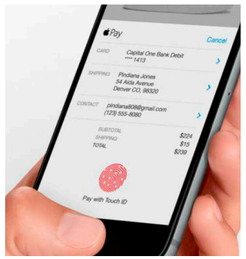


Open an App Clip, select & pay for a coffee. Pick it up in 2 mins.
Mobile native & micro transactional, all within search results.

End to End Example: Coffee Order







Open an App Clip, select & pay for a coffee. Pick it up in 2 mins.
Mobile native & micro transactional, all within search results.

This *is* Search!

A more personal Siri
Your mom's flight lands at 11:18 AM.
Private Cloud Compute
Clean Up in Photos
Summaries in Messages
Writing Tools
Reduce Interruptions in Focus
Apple Intelligence
Image Playground
Genmoji
Image Wand
Audio recording
summaries
Priority messages in Mail
Inbox
Priority notifications
Describe a Memory...
Natural language search

June 2024

Emerging New **Models** of **Search**

Not web initiated, and
results not web centric.

1

The Google Era

2

5 Years Ago: LLMs

3

5 Years Ago: Mobile Traffic

4

Takeaways

1

The
Google Era

2

5 Years Ago:
LLMs

3

5 Years Ago:
Mobile Traffic

4

Takeaways

4

Tactical Takeaways

What does all this mean?!

LLMs Won't Execute **Javascript**

Ensure your site works without it for now.

Recognise **Dark Traffic** Will Continue To Increase

No attribution from ChatGPT,
Siri, ‘deep research’ tools, and more...

Write Your Content To **Persuade** LLMs

They might bypass rankings!

Web Search Is Becoming **More Complex**

Predicting SEO That Works
Is Harder Than Ever

Web Search Is Becoming **More Complex**

Predicting SEO That Works Is Harder Than Ever

SearchPilot

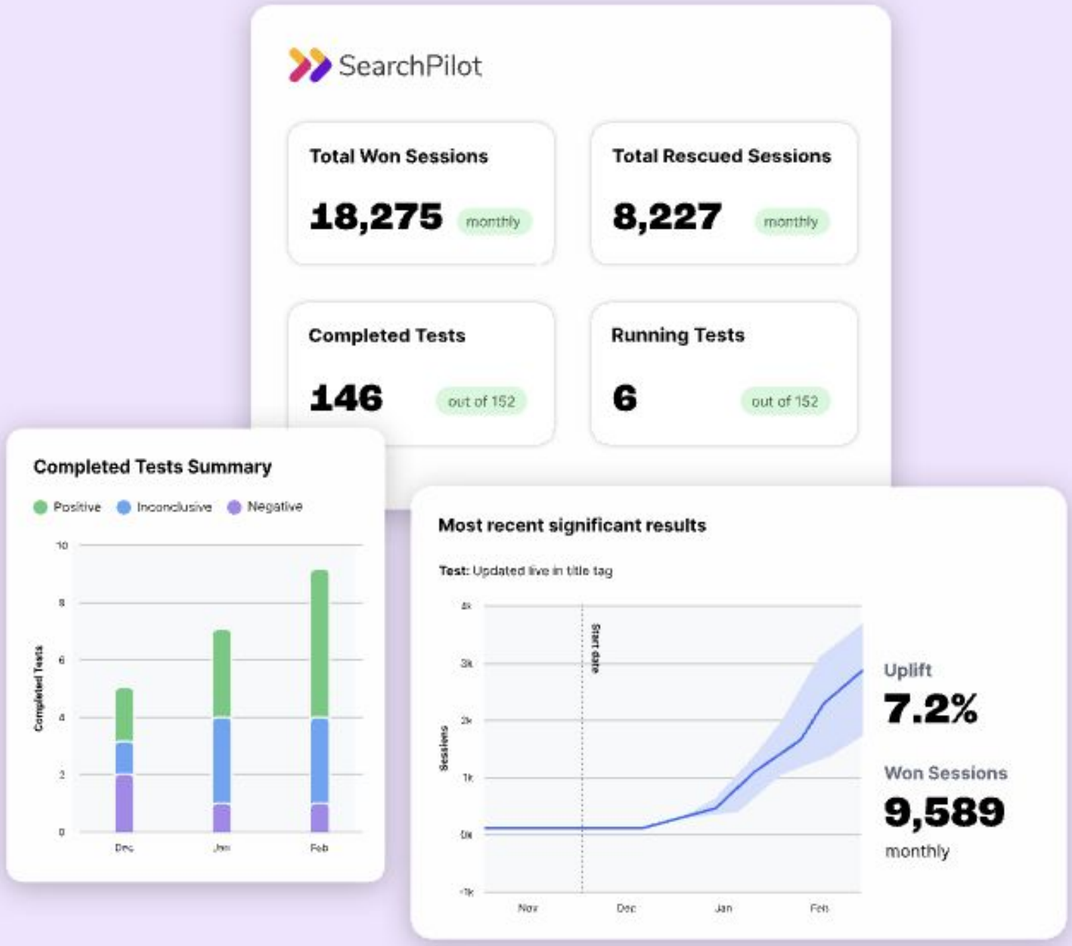
Rapid SEO A/B testing that delivers attributable ROI

SearchPilot helps SEO teams run rapid, revenue-boosting SEO testing programs for large, mission-critical websites.

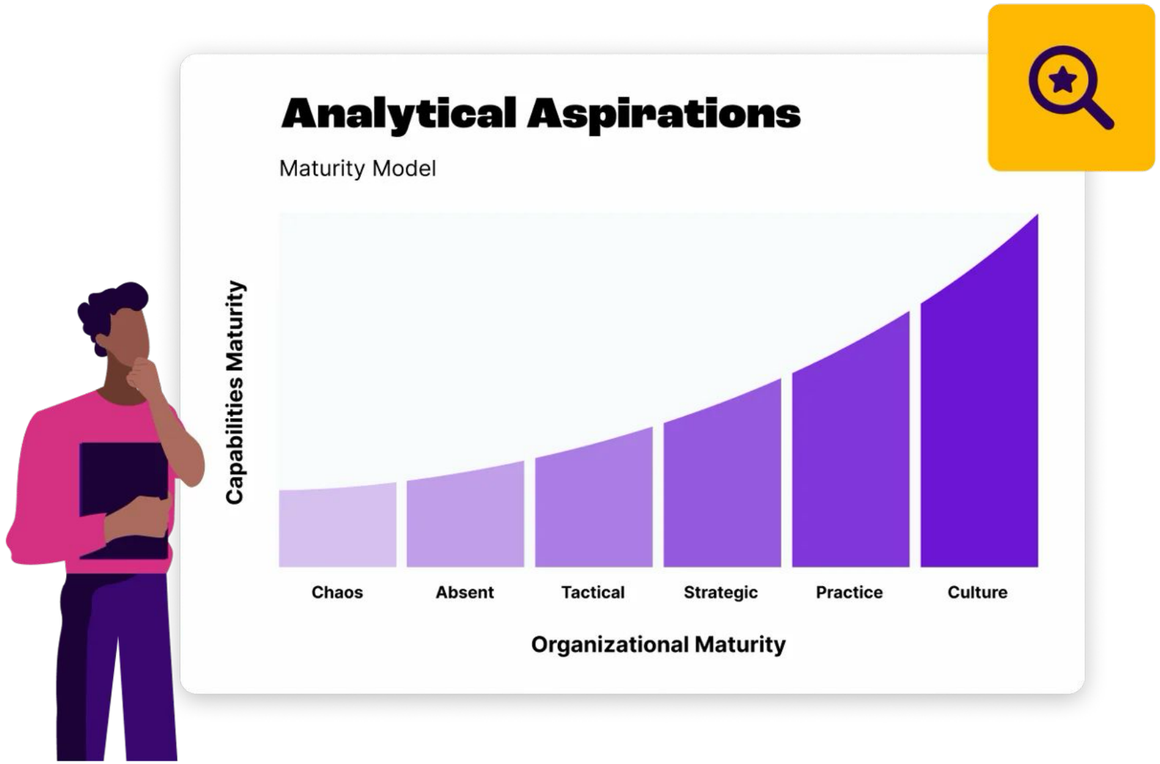
It's time to ramp up your testing, control your cadence, get statistically significant results, and build robust business cases.

We empower SEO teams at...

Skyscanner M&S CHOICE HOTELS petco the stepstone group FLIGHT CENTRE



SEO Testing Discovery Day with Will or Craig



What we'll cover

1. **Custom Assessment:** Determine where you are on the SEO testing maturity curve
2. **SEO Testing Foundations:** Learn how SEO testing works, from ideation to reporting
3. **Relevant Insights:** We'll share testing insights tailored to your site
4. **Integration:** How to integrate SEO testing with your existing user testing program
5. **Actionable Roadmap:** You'll leave with a clear plan for moving up the testing maturity curve

Book now: https://bit.ly/sp-discovery-day

In 2024 There Were...

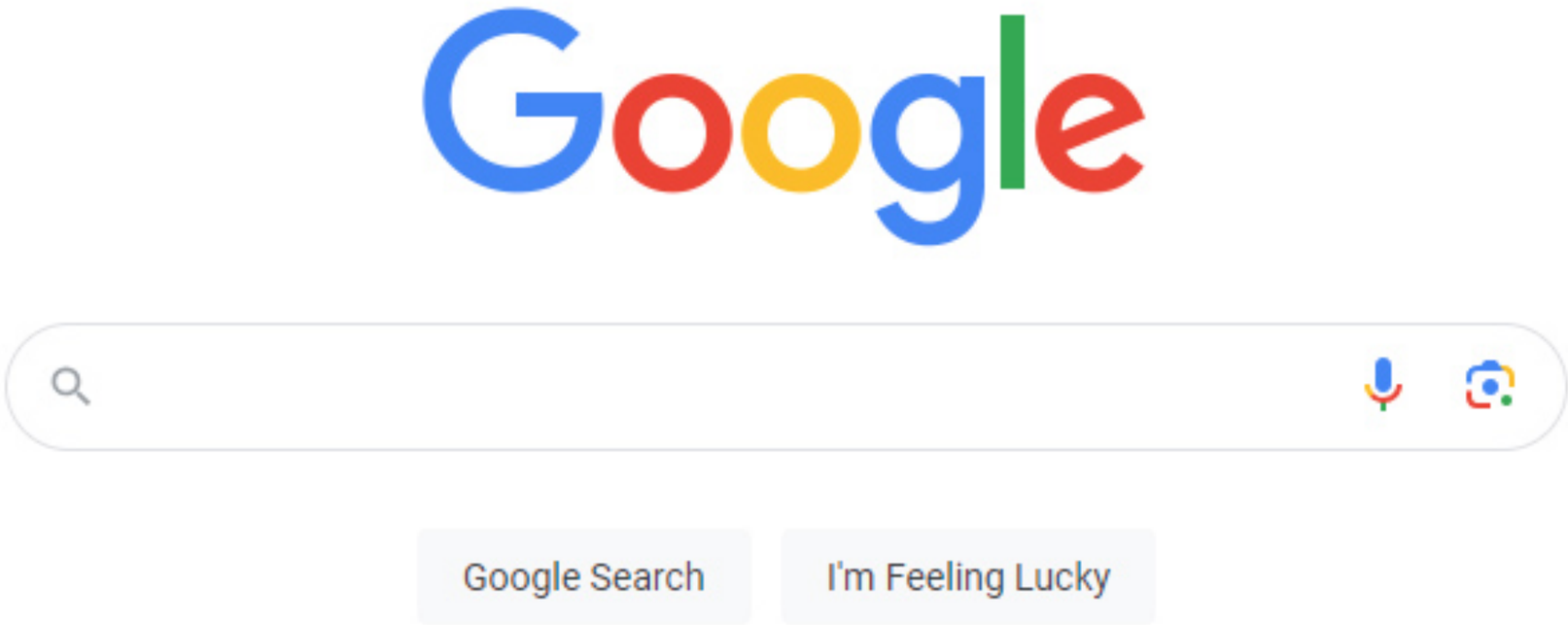
17 Billion

In 2024 There Were...

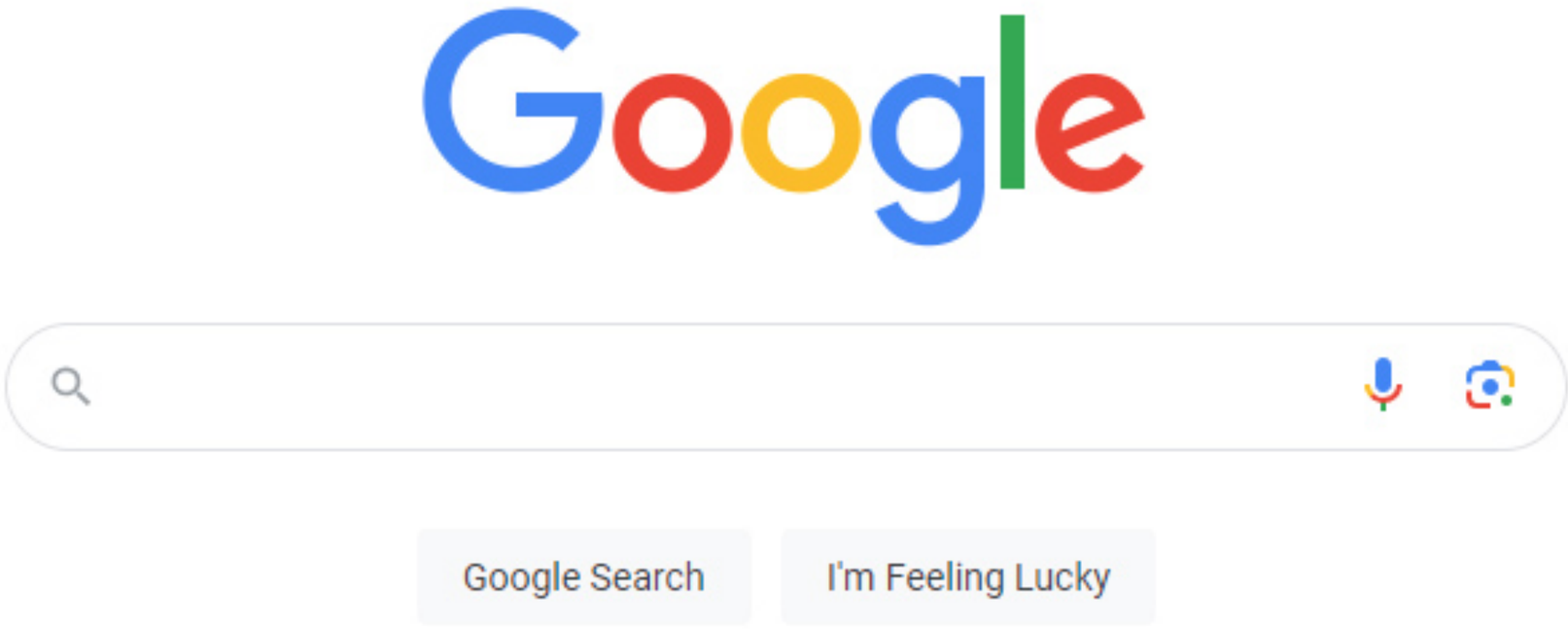
17 Billion

Faxes Sent.

This won’t die…



This won't die...
...but it won't be the only model.



Google Era

1. Only **one corpus**: the web.

2. Searches fulfilled **one query** at a time.

3. Results primarily **links to websites**.

Emerging Era

1. **Multiple corpora**: web, apps, LLMs.

2. **Multiple queries** (federated or agent).

3. Results: **web**, **apps**, & **recommendations**.

SearchPilot

Thank You!

Time for Q&A...

Bluesky: TomAnthony.bsky.social

Fax: +49 821 2138617