

**maize.**

A JAKALA COMPANY

# WHAT IF INTELLIGENT PERSONAL ASSISTANTS EXISTED?

VITTORIO DI TOMASO - PARTNER

# 01. About us



MAIZE is a **strategic design** company,  
converging thought with action  
and creativity with data.

WE USE STRATEGIC DESIGN TO

Infuse <b>strategic thinking</b> in all projects and disciplines.	Impact overall <b>innovation processes</b> .	<b>Orchestrate</b> collaboratively a variety of disciplines.	Respond to the <b>complexity</b> of changing societies and economic scenarios.	Identify internal and external <b>innovation opportunities</b> .
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We explore cultures  
and technologies to generate  
sustainable growth.

# We explore **cultures** and technologies to generate sustainable growth.

## WE EXPLORE CULTURES TO

**Capture** emerging **phenomena** that are currently impacting society.

**Bring new prospectives** from other contexts, systems, and companies.

Understand **deep values and motivations** that drive human behaviour.

Build **inclusive solutions** considering people and the environment they are part of.

We explore cultures  
and **technologies** to generate  
sustainable growth.

WE USE TECHNOLOGIES TO

Identify and implement  
new **transformative**  
**solutions.**

**Experiment**, build **POCs**,  
and quickly prototype  
novel solutions.

Make **informed decisions**  
supported by data, facts  
and real-life scenarios.

**Optimize processes** and  
deliver tangible results.

# We explore cultures and technologies to generate sustainable growth.

## WE ENABLE SUSTAINABLE GROWTH BY

- Challenging and re-imagining current businesses, products and services.
- Structuring innovation models and practices.
- Implementing new ways of working to support emerging lifestyles and organizational change.
- Incorporating our solutions and strategies into larger systems and networks.



# Our heritage

We were born in **H-FARM** as a startup back in the days when it was still an accelerator, contributing to its gradual growth and evolution. We were here when **the most innovative campus in Europe** was just a small project, growing our consultancy practice to become an international player in the innovation ecosystem and a dominant part of H-FARM's overall expansion.

We evolved through the years to become **H-FARM Innovation**, a real go-to partner for innovation strategy all-round for some of the most important brands in Italy and Europe.

In 2017 we founded **MAIZE**, a cultural editorial project as part of H-FARM Innovation, spreading thoughts, opinions, and lively debates about technology, innovation, and society.

2022 was a significant milestone and turning point for H-FARM Innovation, as **we finalized our acquisition by JAKALA** and opened a whole new range of possibilities for growth. Supported by JAKALA **we decided to adopt the name MAIZE** and use it to further strengthen our identity and positioning as an **innovation strategic design company**.





# Part of JAKALA

JAKALA, an **Italian MarTech leader in Europe**, helps its clients unlock their business potential by leveraging data, advanced analytics & artificial intelligence, technology, content, and experience design.

Founded in 2000, JAKALA was the first company in Italy to integrate marketing and technology. Thanks to data, JAKALA also helps clients transform successful loyalty programs into more innovative and technological ecosystems, to retain high-value customers and deliver a more personalized experience.

The company has an international presence with offices in 15 countries (New York, Sao Paulo, Shanghai, Moscow, London, and Milan).





# Our services

## Research and insights

- QUALITATIVE AND QUANTITATIVE RESEARCH
- DATA ENRICHMENT
- MARKET AND CONSUMER TRENDS
- STRATEGIC FORESIGHT

We **capture signals**, collect and **analyze market data** in order to identify phenomena and generate insights that lead to a better **understanding of emerging scenarios**.

## Transformative innovation

- INNOVATION STRATEGY ROADMAP
- INNOVATION MODELS
- 3D AND IMMERSIVE TECHNOLOGIES
- AI AND LANGUAGE TECHNOLOGIES

We make innovation an integral and complimentary part of everyday business, using **methods and technologies** to develop a **strategic implementation roadmap**.

## Ventures, products and services

- VENTURE BUILDING
- PROCESS OPTIMISATION AND REDESIGN
- OPEN INNOVATION
- DIGITAL PRODUCTS
- PRODUCT AND SERVICE DESIGN

We help companies design **new business models** and **opportunities**, building initiatives, new products and services with an **end-to-end approach**.

## Brand experiences

- EXPERIENCE DESIGN
- BRAND IDENTITY
- CREATIVE DIRECTION AND PRODUCTION
- VISUAL AND INTERACTION DESIGN
- EDITORIAL AND MEDIA

We design and deliver experiences to **engage** customers and stakeholders using **critical vision, creativity** and **content**.

## Organization and culture

- INTERNAL COMMUNICATION
- TALENT AND GROWTH
- EMPLOYER BRANDING
- ORGANIZATIONAL DESIGN

We guide the evolution of **corporate organizational models** suited to the context of change, and design programmes that embrace the entire **people empowerment ecosystem**.



# 02. Where are we with machines and language?

A **Large Language Model (LLM)**, in the current usage, is a large deep **neural network**, trained with huge amount of texts, to be a model of a language.

Just an **example** of ChatGPT (based on OpenAI GPT-x Large Language Model)

I know we have seen so many :-)

This is only to remember how “capable” the model is.

1 1 2 6 24 120 720 5040

1 1 2 6 24 120 720 5040



given the sequence: 1 1 2 6 24 120 720 5040 what is the next number?



The given sequence appears to be following the pattern of factorial numbers. Factorial numbers are calculated by multiplying a given number by all the positive integers less than it down to 1.

$$1! = 1$$

$$2! = 2 * 1 = 2$$

$$3! = 3 * 2 * 1 = 6$$

$$4! = 4 * 3 * 2 * 1 = 24$$

$$5! = 5 * 4 * 3 * 2 * 1 = 120$$

$$6! = 6 * 5 * 4 * 3 * 2 * 1 = 720$$

$$7! = 7 * 6 * 5 * 4 * 3 * 2 * 1 = 5040$$

Following this pattern, the next number in the sequence would be 8! (8 factorial):

$$8! = 8 * 7 * 6 * 5 * 4 * 3 * 2 * 1 = 40,320$$

Therefore, the next number in the sequence is 40,320.

1 1 2 6 24 120 720 5041

1 1 2 6 24 120 720 5040



given the sequence: 1 1 2 6 24 120 720 5041 what is the next number?



Looking at the given sequence, it appears to follow the pattern of factorial numbers, except for the last term which deviates from the pattern.

$$1! = 1$$

$$2! = 2 * 1 = 2$$

$$3! = 3 * 2 * 1 = 6$$

$$4! = 4 * 3 * 2 * 1 = 24$$

$$5! = 5 * 4 * 3 * 2 * 1 = 120$$

$$6! = 6 * 5 * 4 * 3 * 2 * 1 = 720$$

$$7! = 7 * 6 * 5 * 4 * 3 * 2 * 1 = 5040$$

However, the next term in the sequence, instead of being  $8!$ , is given as 5041. This breaks the pattern of factorial numbers. Without a clear pattern, it is difficult to determine the next number in the sequence based on the given information alone. It is possible that there may be another pattern or rule that governs the sequence, or the sequence may be incomplete or arbitrary.

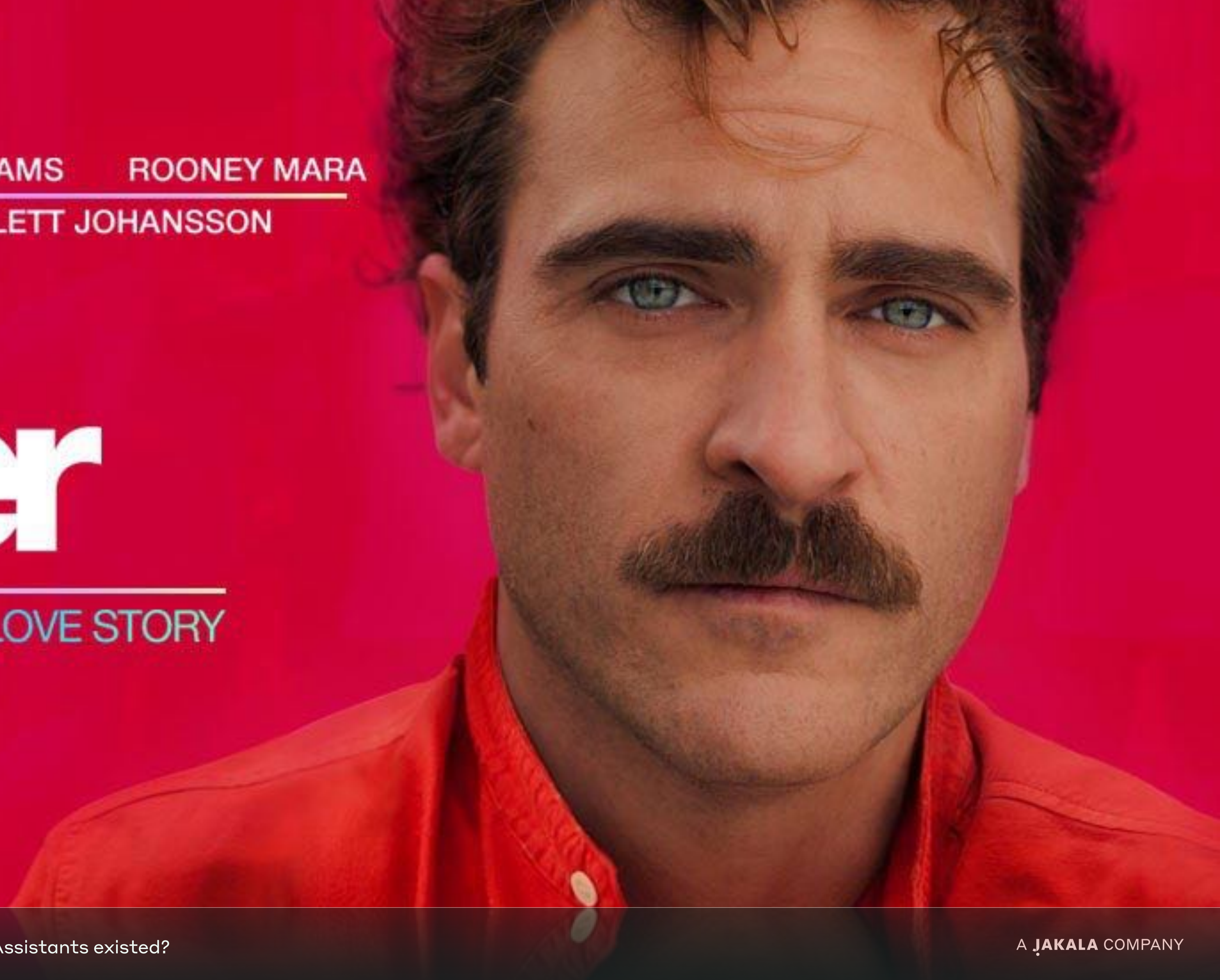
# 03. An exploration of digital commerce in the new world



JOAQUIN PHOENIX   AMY ADAMS   ROONEY MARA  
OLIVIA WILDE   AND SCARLETT JOHANSSON

# her

A SPIKE JONZE LOVE STORY





# Samantha

**Samantha** is described as both a **personal assistant** and as a **companion**.

In the course of the movie, we see her companionship relation with Theodore evolve from some kind of awkward **friendship** to an **emotional relationship** (including **sex**) to **love** to **abandon** and despair.

But here I am more **interested** in her role of **personal assistant**.

We don't see much about that, after the **very first encounter**, where Samantha read and reply to all Theodore emails, and re-arrange all his files. Then the movie goes in the other direction, the emotional one.



# Samantha, your personal shopper

We have a **glimpse**, half way through the movie, when Theodore goes to a birthday party for a girl called Jocelyn.

There is this dialogue with Samantha

That's all, but we can safely infer that **Samatha goes shopping!**

And that **Theodore trusts her** enough to actually choose the dress and buy it.

THEODORE Hey, Samantha?

SAMANTHA Hey mister.

THEODORE She loves the dress. She just went to try it on.

SAMANTHA Really? I picked a good one!

THEODORE Yeah.

SAMANTHA Oh good.

# I.A.P.A.

## Intelligent Artificial Personal Assistant

**IAPA = Samantha - (emotion, sex)**



# Humans will love IAPAs

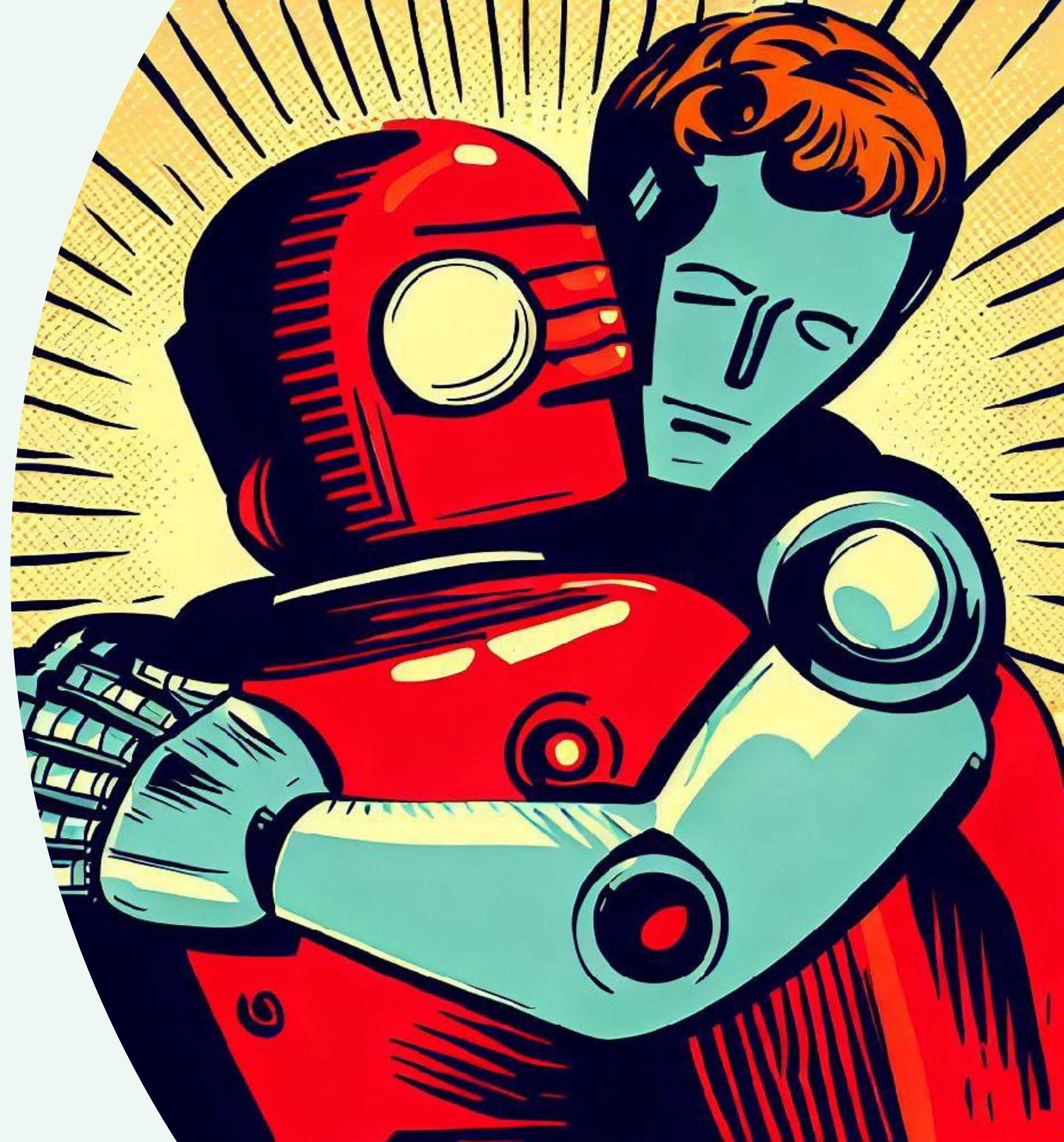
IAPAs are perfectly **competent language users**

IAPAs are very **capable**, they are connected to the internet and **can do things for you** in the digital domain

IAPAs are **personalized**:

- \* They know "everything" about your **public life**
- \* They probably know a lot about your **values and opinions** on many topics
- \* They will also know everything about your **demo**, like Jakala Exagon on steroids!

They are the quintessential **calm technology**, always there, in the **periphery** and **ready** for you: no interface to navigate, no hassle







# Will you let your IAPA buy for you:

The background of the slide is a close-up, slightly blurred photograph of several rolls of white toilet paper. The rolls are stacked and partially unrolled, showing the texture of the paper. The lighting is soft, creating gentle shadows and highlights on the paper's surface.

# Toilet paper





# Pasta





# BOOKS





# Clothes (for you)





# Shoes





Something related  
to your passion



A tropical beach scene with a white umbrella and lounge chairs. The background shows a clear blue sky, a turquoise ocean, and white sand. Two wooden lounge chairs with grey cushions are positioned on the sand. A large white umbrella stands behind them. Palm fronds are visible in the foreground and background.


# A vacation





# A new car





# A new house

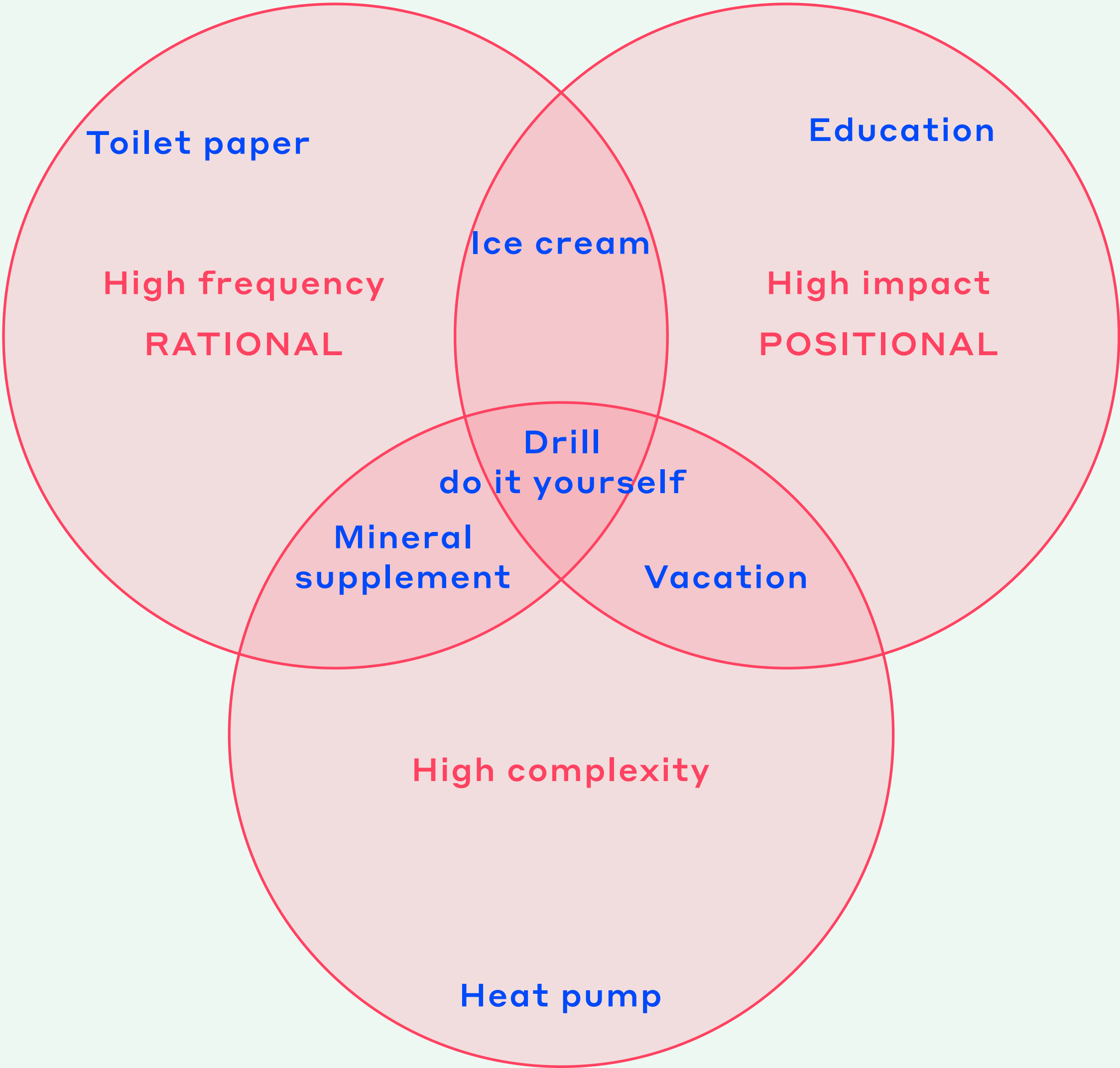




# Education



# A possible model





# A complication

IAPAs are trained to have certain "**opinions**".

Companies like OpenAI or Anthropic will want their IAPAs to **behave well**, to be not confrontational and not divisive.

How will those "opinions" **influence** the conversation with their humans?

For example, it won't even mention a brand that engaged in **greenwashing** if it knows you're an activist

IAPAs could potentially **bury the brand** into oblivion, the equivalent of the **second page of Google**.



# 04. Is it real?

# Is it possible?



# This is happening

**Microsoft** will now, for example, use Bing's GPT-powered AI capabilities to **automatically generate buying guides** when you use a query like "college supplies."

It will automatically **aggregate products** in each category it comes up with, list their specs so you can **compare** similar items and, of course, tell you **where to buy them** (with Microsoft getting an affiliate fee when you buy).



## Microsoft brings new AI-powered shopping tools to Bing and Edge

Frederic Lardinois @fredericl / 5:00 PM GMT+2 • June 29, 2023





# This is happening

JPMorgan Chase is developing a ChatGPT-like software service that leans on a disruptive form of artificial intelligence to select investments for customers, CNBC has learned.

The company applied to trademark a product called [IndexGPT](#) this month, according to a filing from the New York-based bank.

IndexGPT will tap “cloud computing software using artificial intelligence” for “analyzing and selecting securities tailored to customer needs,” according to the filing.

## FINANCE

## JPMorgan is developing a ChatGPT-like A.I. service that gives investment advice

PUBLISHED THU, MAY 25 2023 5:50 PM EDT UPDATED THU, MAY 25 2023 6:03 PM EDT



Hugh Son  
@HUGH\_SON

WATCH LIVE

### KEY POINTS

- JPMorgan Chase is developing a ChatGPT-like software service that leans on a disruptive form of artificial intelligence to select investments for customers, CNBC has learned.
- The company applied to trademark a product called IndexGPT earlier this month, according to a filing from the New York-based bank.
- “It’s an A.I. program to select financial securities,” said trademark lawyer Josh Gerben. “This sounds to me like they’re trying to put my financial advisor out of business.”



# This is happening

**Booking.com**, one of the world’s leading digital travel platforms, has announced its new **AI Trip Planner**, which will launch in beta to a selection of US travelers in the company’s app on June 28.

Built upon the foundation of Booking.com’s **existing machine learning models** that recommend destination and accommodation options to millions of travelers on the platform every day, the AI Trip Planner is **also partially powered by large language model (LLM) technology from OpenAI’s ChatGPT API** to create a new conversational experience for people to start their trip planning process.

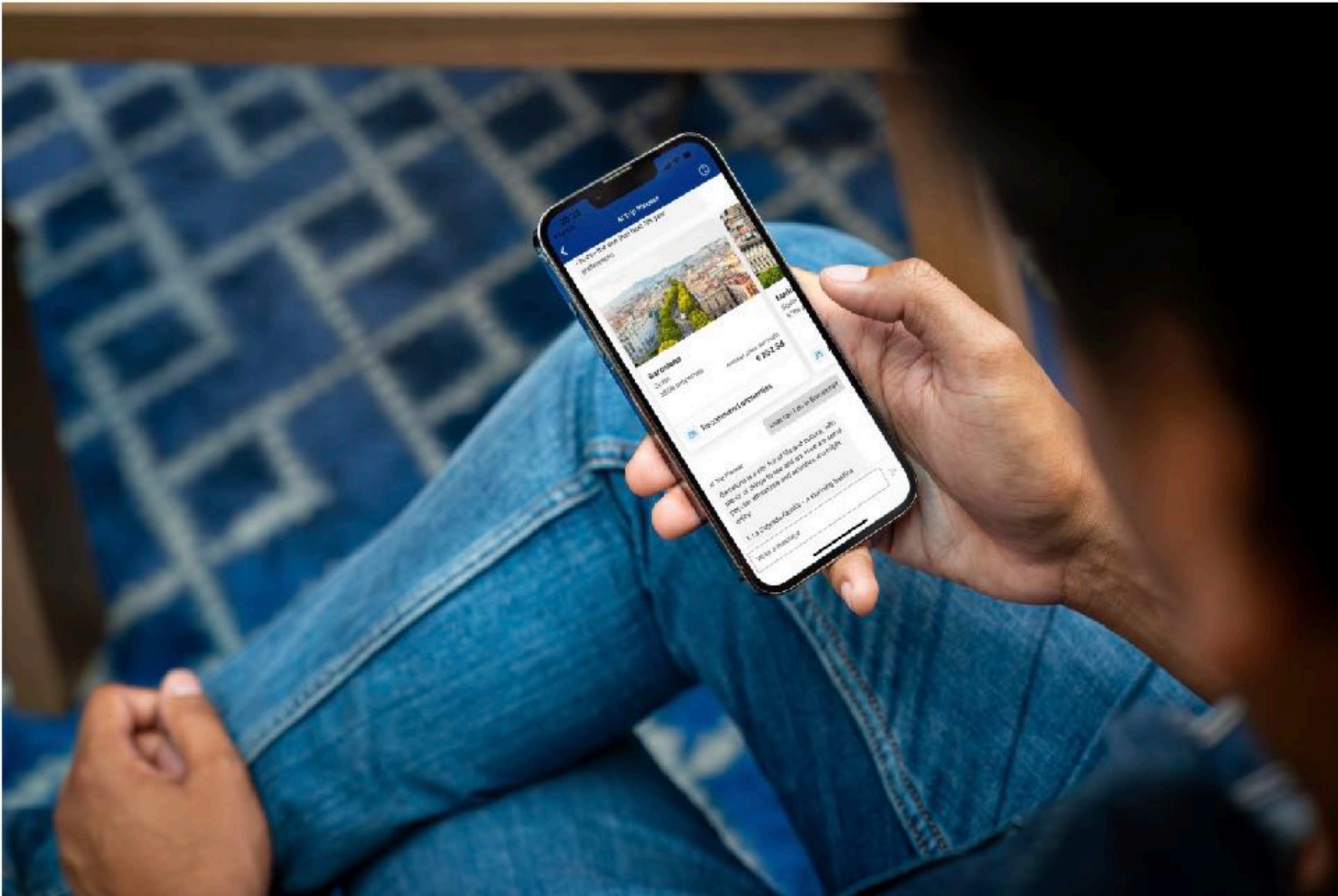
Booking.com

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Amsterdam, 27 June 2023

Booking.com Launches New AI Trip Planner to Enhance Travel Planning Experience



AMSTERDAM, 27 June 2023 - Booking.com, one of the world's leading digital travel platforms, has announced its new AI Trip Planner, which will launch in beta to a selection of US travelers in the company's app on June 28. Built upon the foundation of Booking.com's existing machine learning models that recommend destination and accommodation options to millions of travelers on the platform every day, the AI Trip Planner is also partially powered by large language model (LLM) technology from OpenAI's ChatGPT API to create a new conversational experience for people to start their trip planning process.

A new way to search and explore on Booking.com

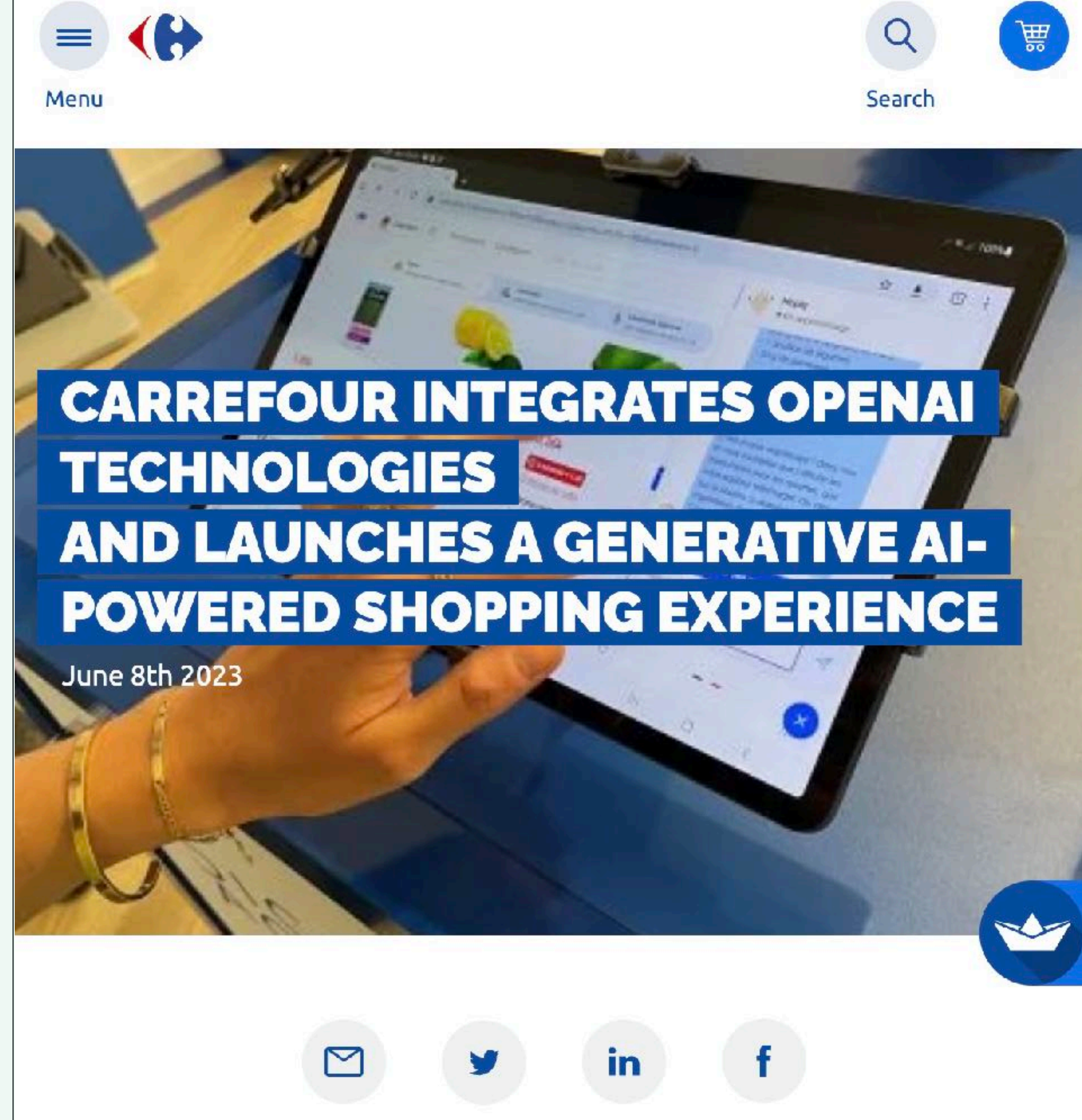


# This is happening

Carrefour is deploying three innovative tech solutions based around ChatGPT technology:

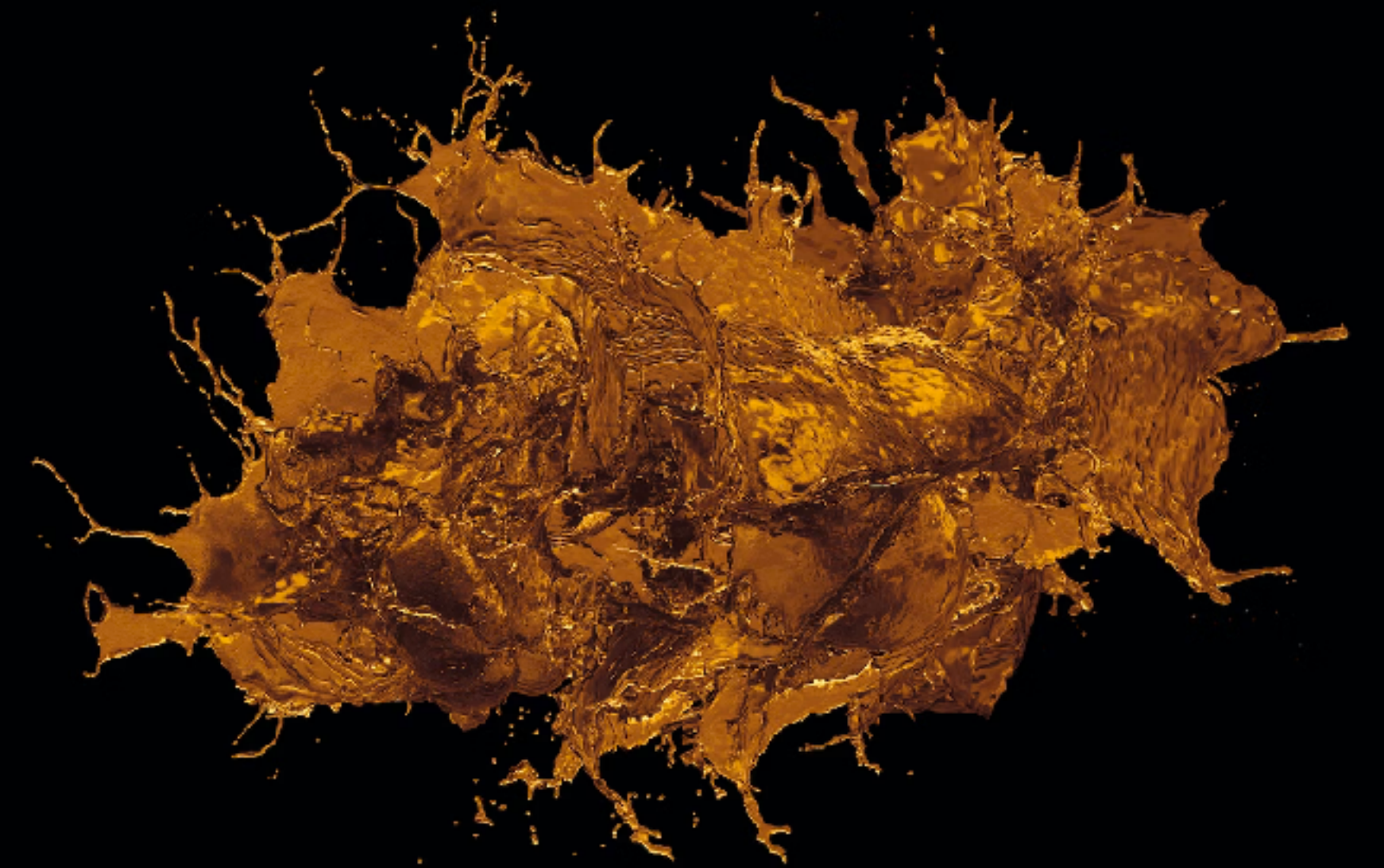
- \* an advice robot for shopping on [carrefour.fr](https://www.carrefour.fr),
- \* description sheets for Carrefour brand products on its website
- \* support for purchasing procedures.

These solutions are based on OpenAI technologies, particularly GPT-4.



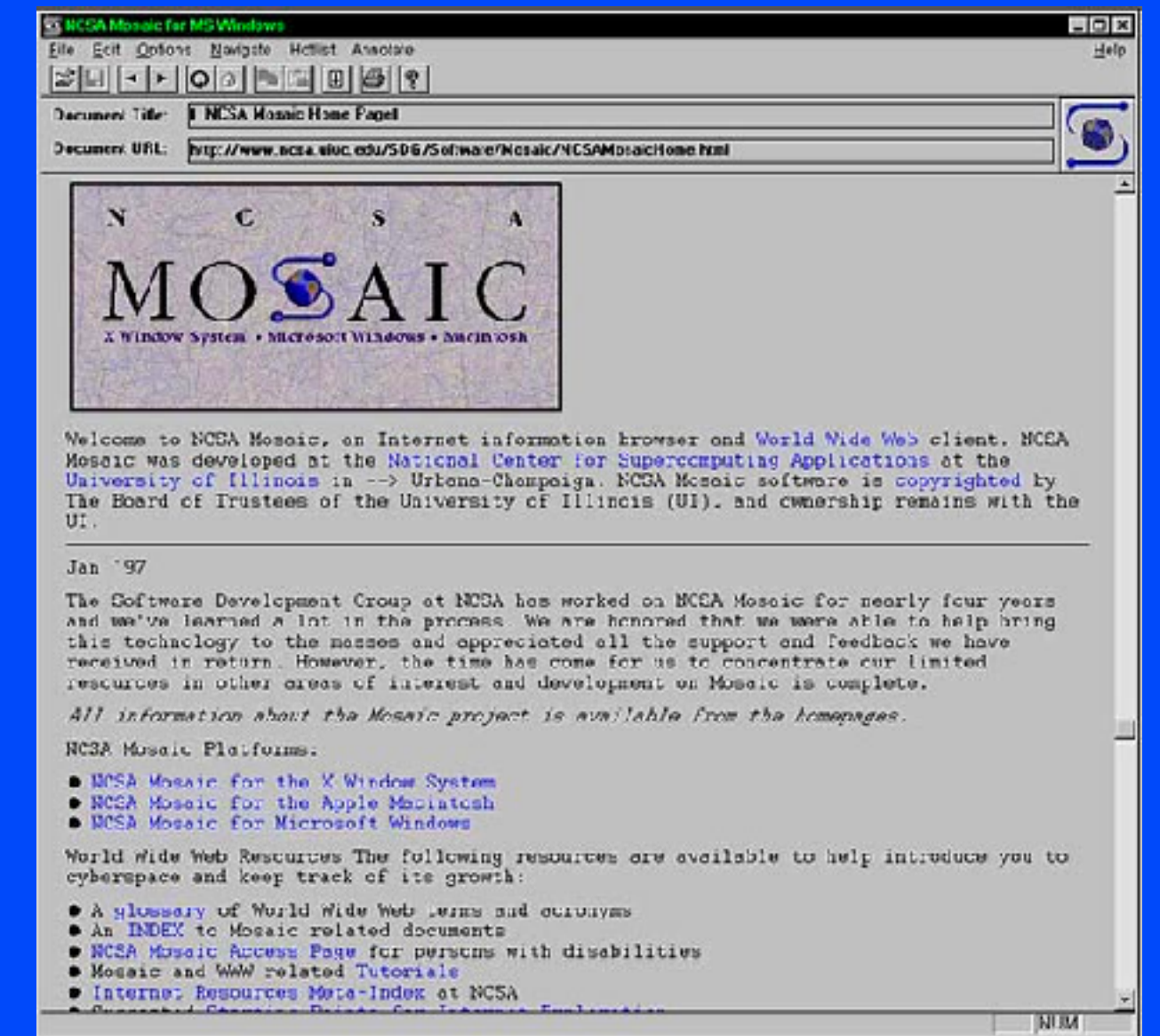


The economy is looking for  
the goldmine: products /  
solutions based on  
intelligent talking  
machines



# From the **business point** of view, it's **up to us** to imagine new **value** propositions that use LLMs

As some have said (recently Satya Nadella during Build 2023) this is like the arrival of **Mosaic**. It took a while (and many failures) to really understand the business value of the web.



# THANK YOU