



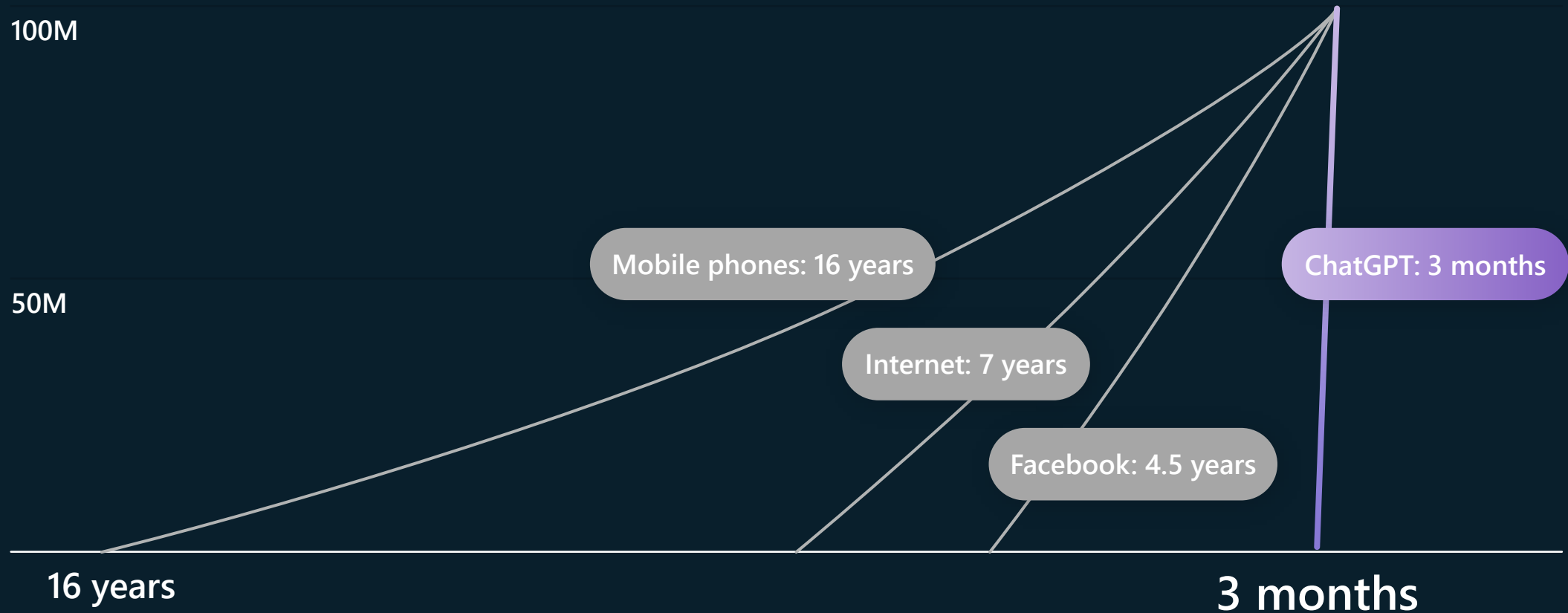
# Power your business transformation with AI

Bruno Marques

Microsoft EMEA Energy Bizz Apps Lead

# Generative AI technology is here

Time to reach 100M users





"We've seen a 25% productivity increase with Copilot, and that frees up so much of your time in the day to have more thoughtful conversations and talk about your next big idea."



Maggie Hewitt

Senior Site Reliability Engineering Manager, Duolingo

## LUMEN

"Our people are seeing immediate productivity improvements with Copilot."



Kate Johnson

CEO, Lumen Technologies



"Using AI-powered tech will enhance Mayo Clinic's ability to lead the transformation of healthcare."



Cris Ross

CIO, Mayo Clinic



"It's been exciting to pilot with Microsoft during this defining and groundbreaking moment of AI."



Sherry Neubert

VP and CIO, Goodyear



"... I asked Copilot to give me a summary ... saved me 45 minutes of reading the documents."



Christoph Sieger

Digital Workplace, Bayer



"Assisted by Copilot and ChatGPT, I'm more productive than I would be if I never stopped programming. A heartfelt thank you to the arc of progress."



Tobias Lütke

CEO, Shopify

How did we get here?

# A brief history of AI

Artificial Intelligence

Machine Learning

Deep Learning



1950s

## Artificial Intelligence

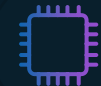
the field of computer science that seeks to create intelligent machines that can replicate or exceed human intelligence.



1959

## Machine Learning

subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions.



2010

## Deep Learning

a machine learning technique in which layers of neural networks are used to process data and make decisions.

# A brief history of AI

96%

RESNET vision test  
152 layers

5.1%

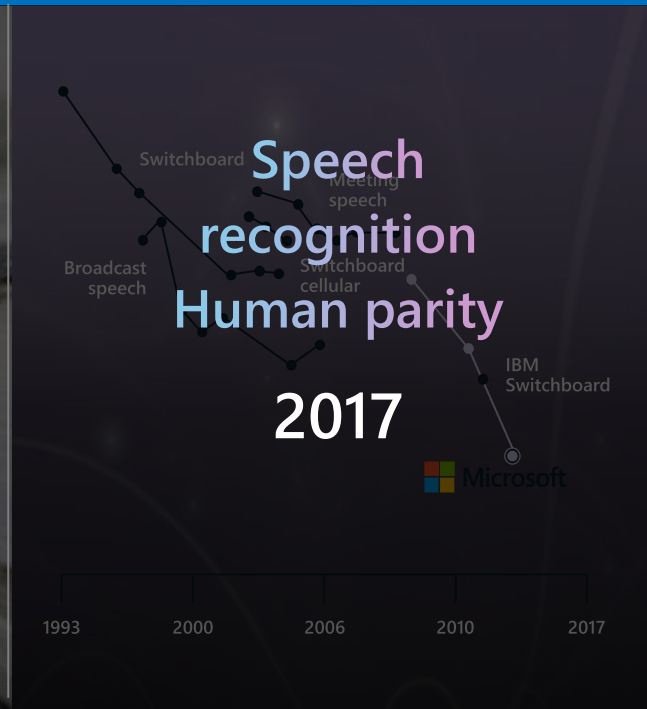
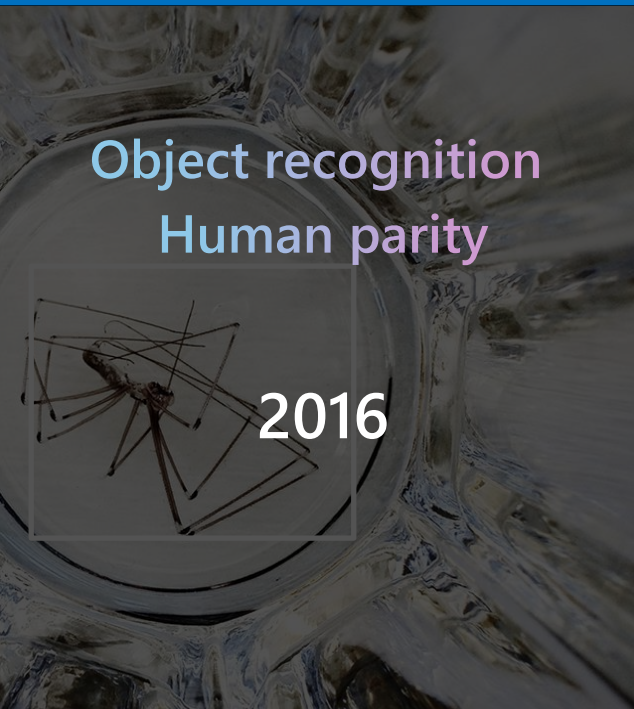
Switchboard speech  
recognition test

88.49%

SQuAD reading  
comprehension test

69.9%

MT  
research system



Vision

Speech

Language

# A brief history of AI

Artificial Intelligence

Machine Learning

Deep Learning

Generative AI



1950s

## Artificial Intelligence

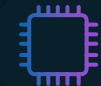
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1959

## Machine Learning

subset of AI that enables machines to learn from existing data and improve upon that data to make decisions or predictions.



2017

## Deep Learning

a machine learning technique in which layers of neural networks are used to process data and make decisions.



2021

## Generative AI

create new written, visual, and auditory content given prompts or existing data.

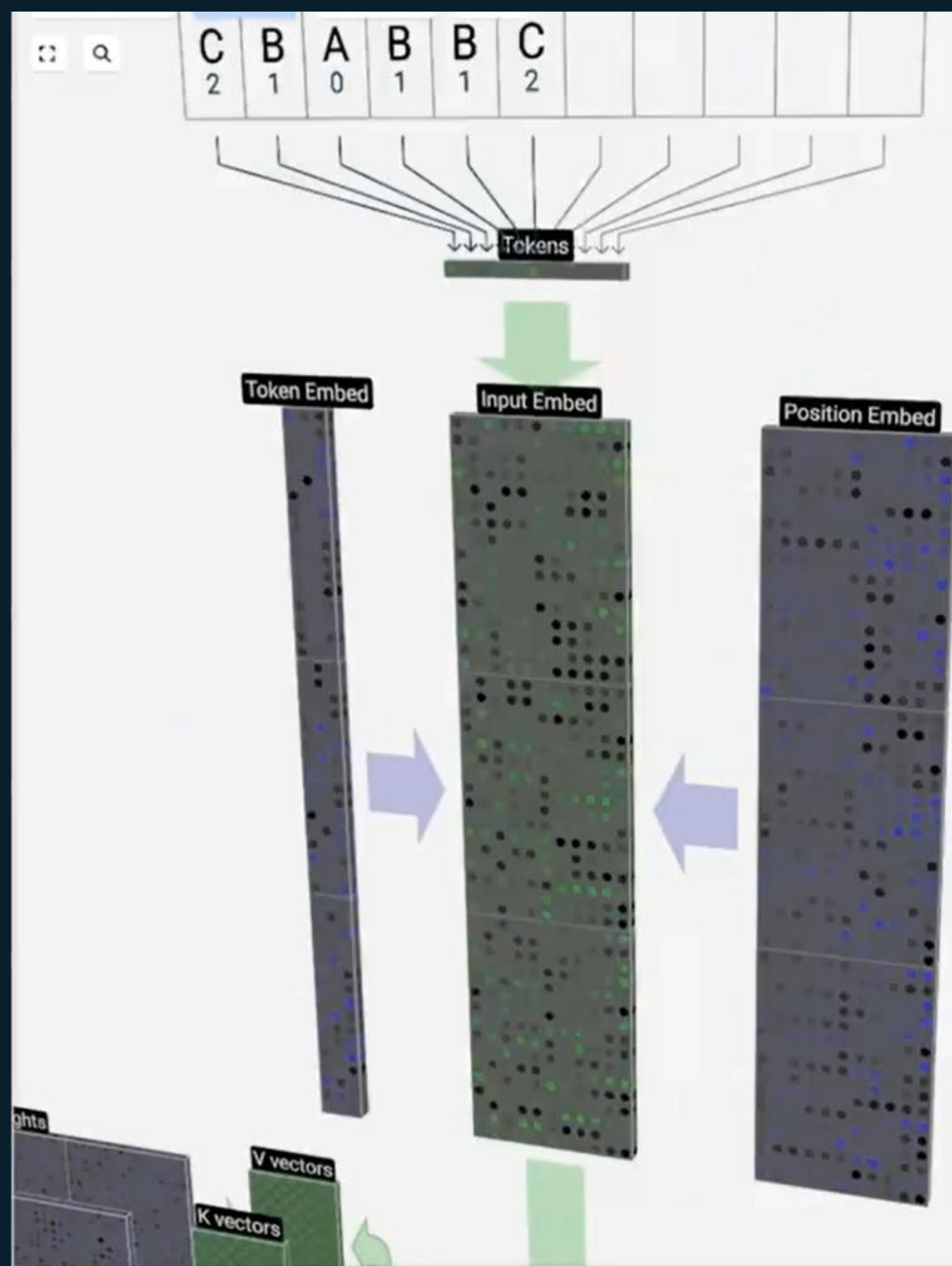
# How LLMs work?

It's raining cats and dogs

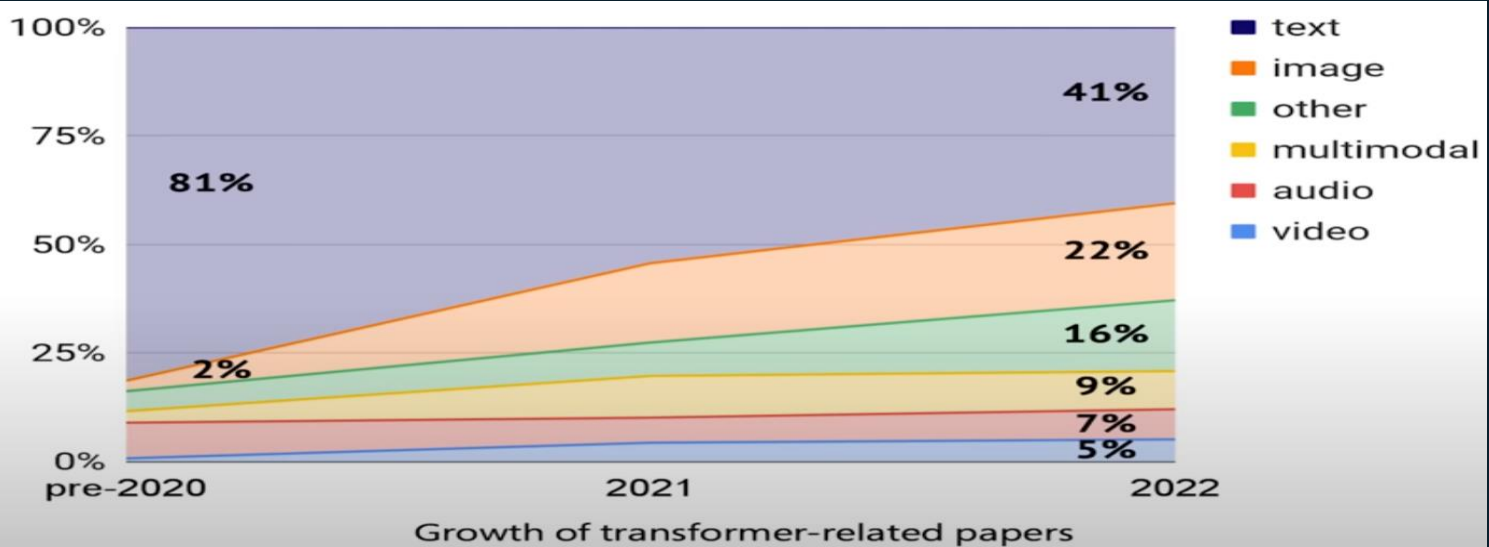
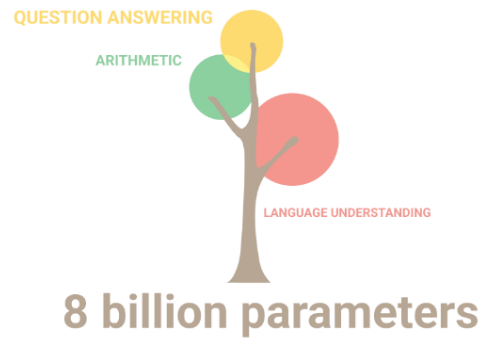
A LLM is basically a very sophisticated  
autocomplete



# How a LLM works



# A brief history of GenAI



# The investments in GenAI

## GPT

Prompt:

Write a tagline for an ice cream shop.

Response:

We serve up smiles with every scoop!

## Codex

Prompt:

Table customers, columns = [CustomerId, FirstName, LastName, Company, Address, City, State, Country, PostalCode]

Create a SQL query for all customers in Texas named Jane  
query =

Response:

```
SELECT *  
FROM customers  
WHERE State = 'TX' AND  
FirstName = 'Jane'
```

## DALL·E

Prompt: A white Siamese cat

Response:



## SORA

Prompt: close-up shot of a Victoria crowned pigeon showcases its blue plumage



# The investments in GenAI

SORA

Prompt: Photorealistic closeup video of two pirate ships battling each other as they sail inside a cup of coffee.





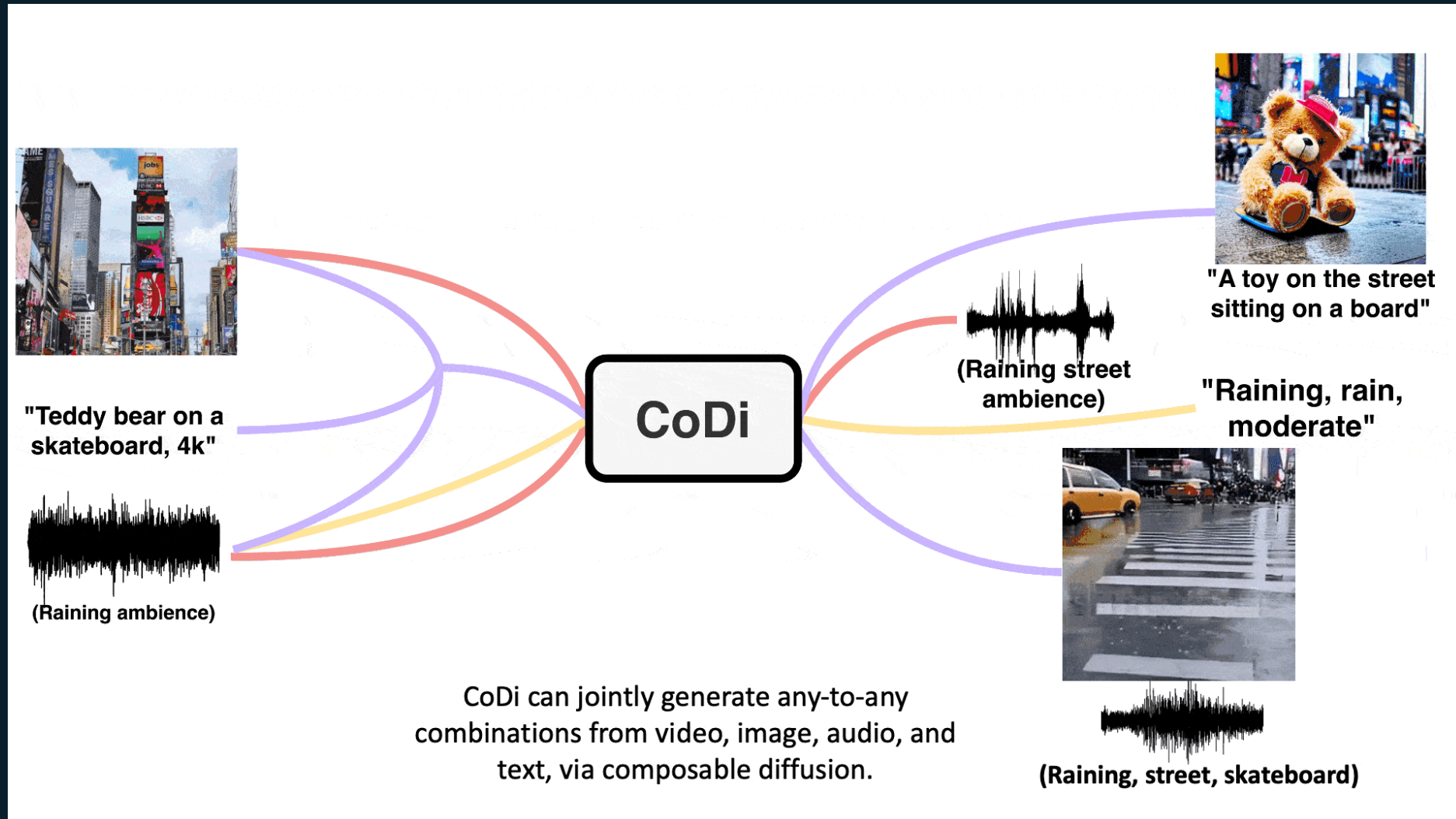
# The investments in GenAI

## SORA

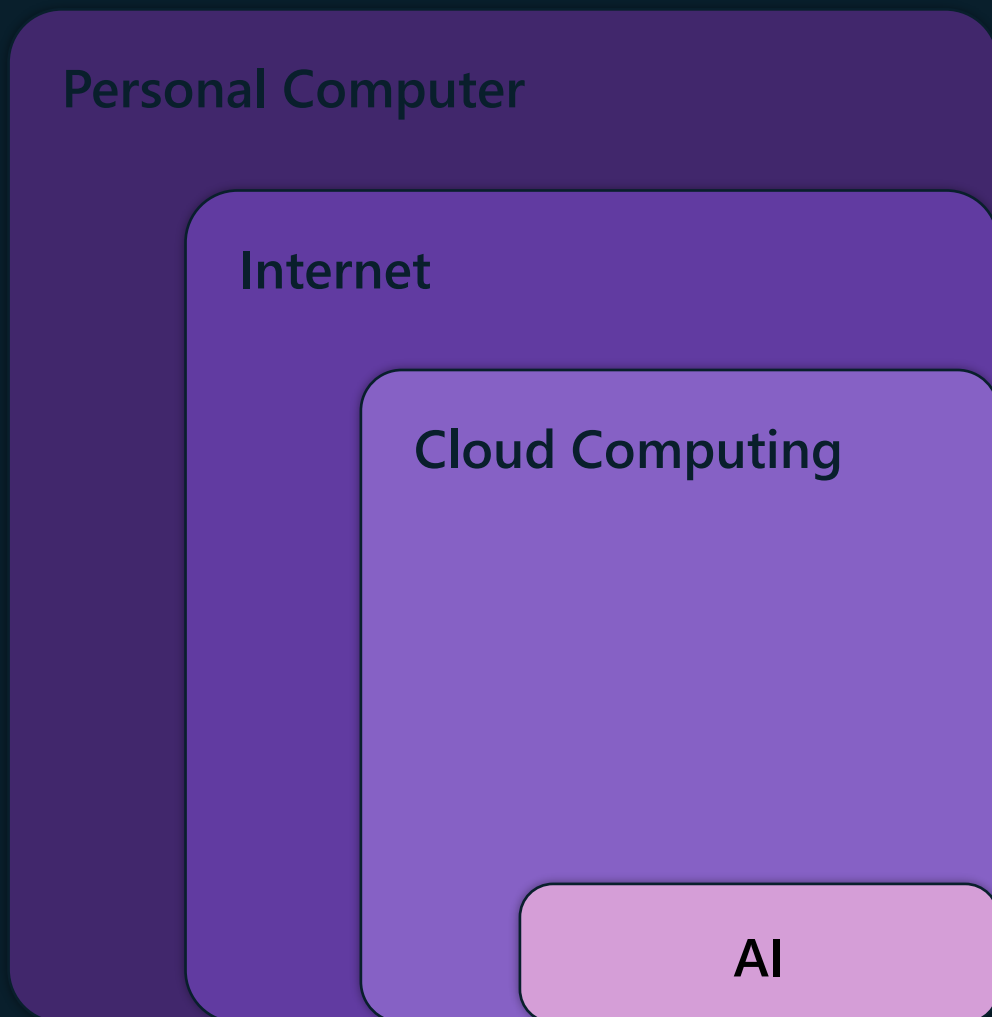
Prompt: A movie trailer featuring the adventures of the 30 year old space man wearing a red wool knitted motorcycle helmet, blue sky, salt desert. cinematic style. shot on 35mm film



# What is coming in GenAI



# The evolution of Microsoft



1975

**Founded as a PC company**

"A PC on every desk in every home"



1995

**Evolved into an Internet company**

Embraced the emerging Internet technology and focused more and more on web products



2012

**Evolved into a Cloud company**

Cut ties with the traditional software business, shifting to subscription-based cloud services



2018

**Evolved into an AI company**

Infuse AI in all aspects of all services, enable everyone to harness AI to build and create

# Nvidia H100 GPU Shipments by Customer



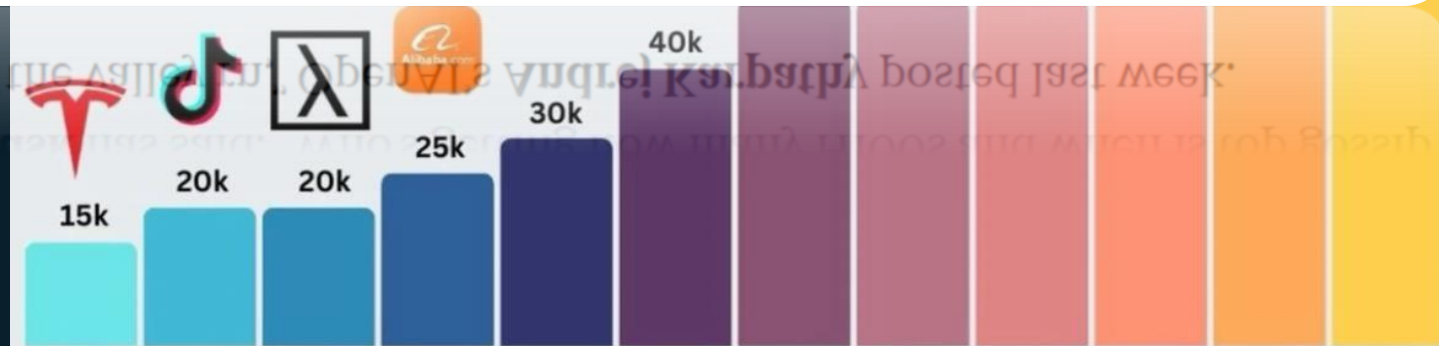
150k 150k



Source: the Verge

The most sought-after resource in the tech industry right now isn't a specific type of engineer. It's not even money. It's an AI chip made by Nvidia called the H100.

Securing these GPUs is "considerably harder to get than drugs," **Elon Musk** has said. "Who's getting how many H100s and when is top gossip of the valley rn," OpenAI's **Andrej Karpathy** posted last week.



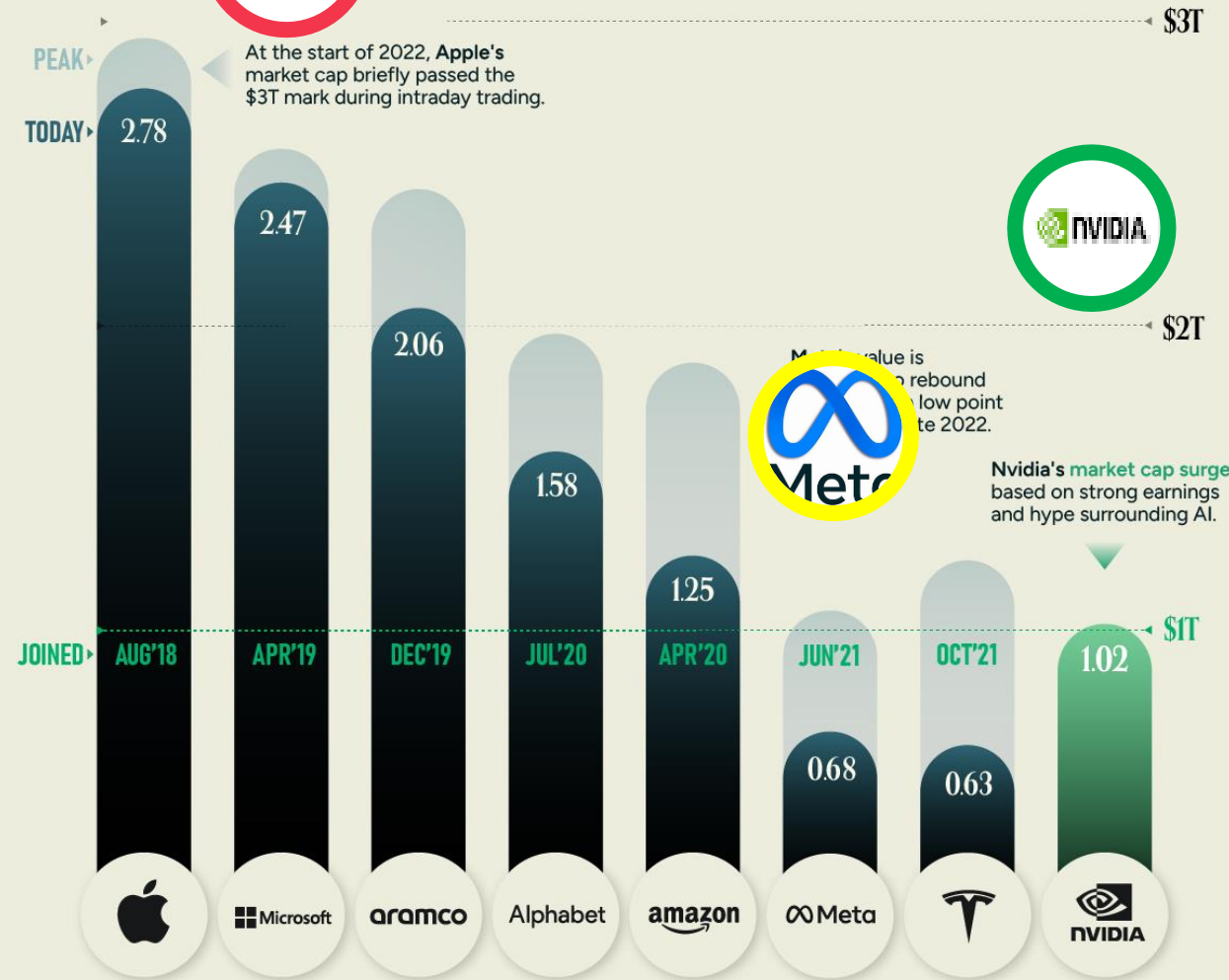


Source: visual capitalist

# \$1 TRILLION MARKET CAP CLUB

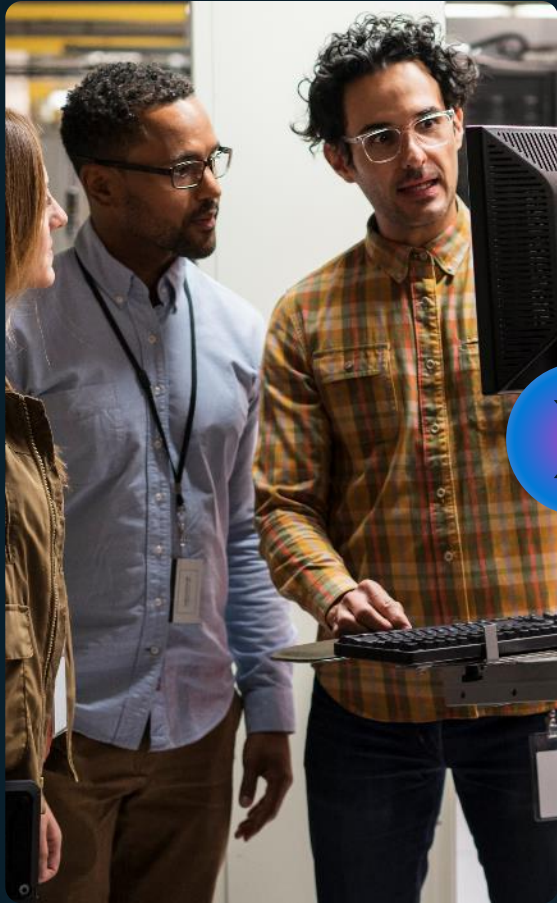


...company to have hit \$1 trillion in market capitalization in one chart



How GenAI is being used?

# Technological progress has been gradual...



Mainframe

PC

Cloud

Mobile



# Now technology is being reimaged... by AI



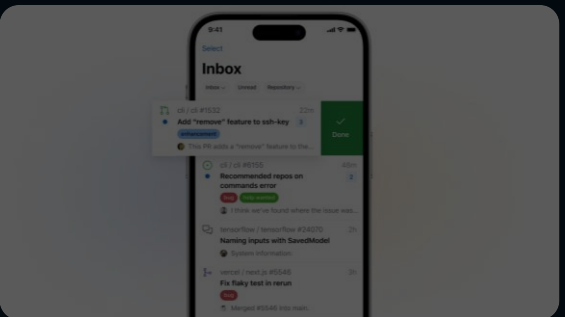
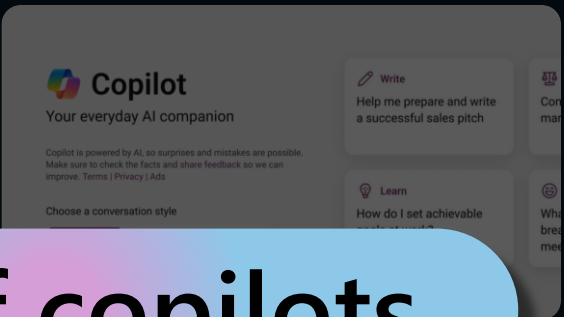
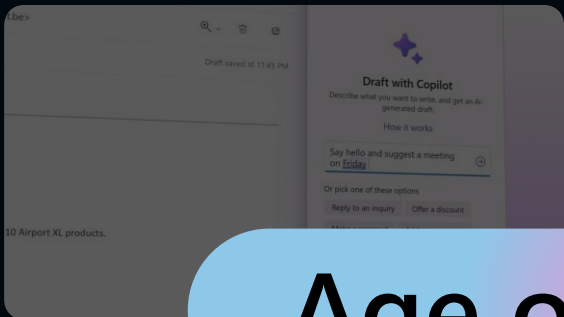
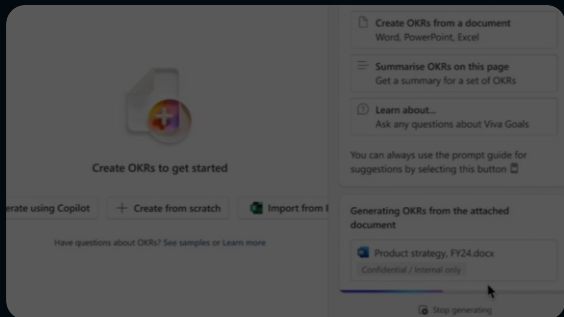
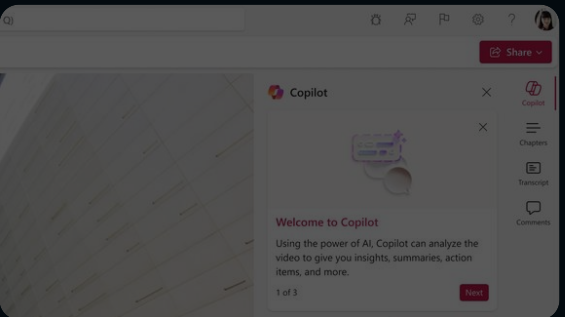
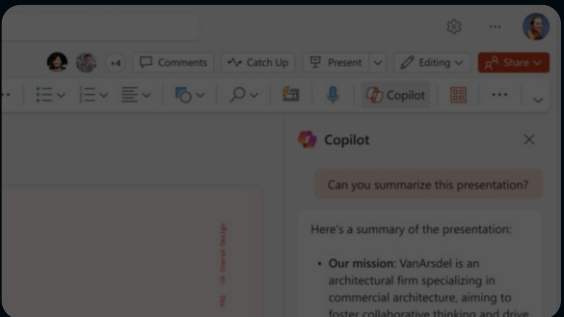
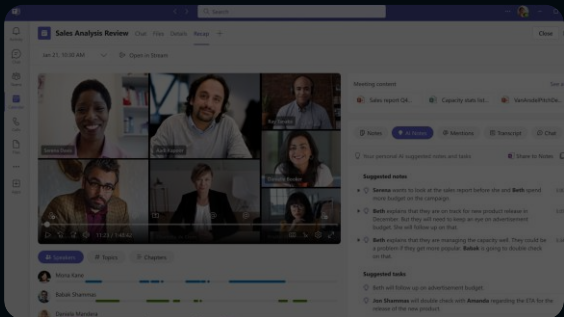
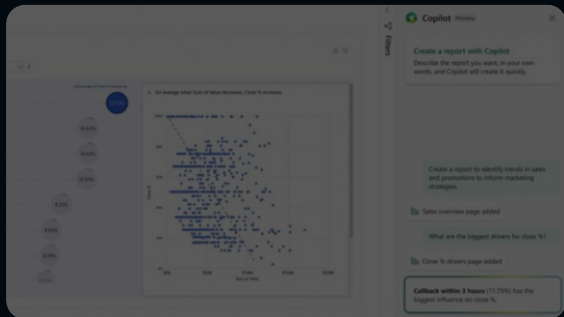
Mainframe

PC

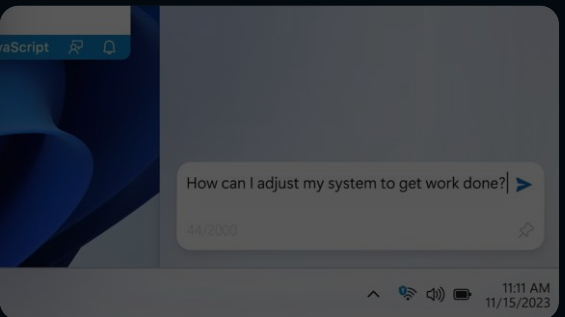
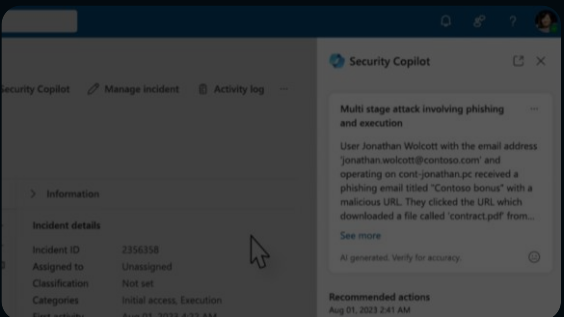
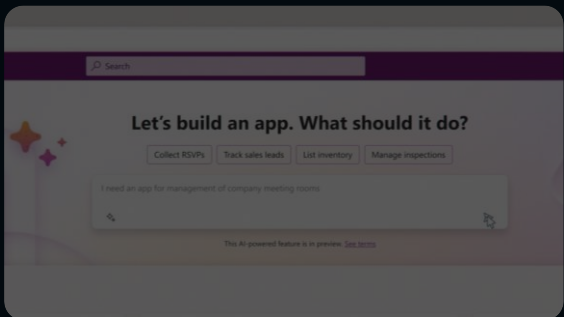
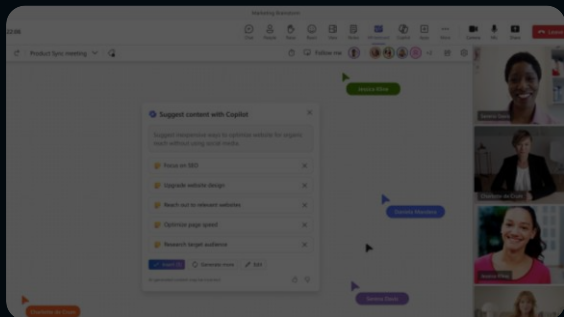
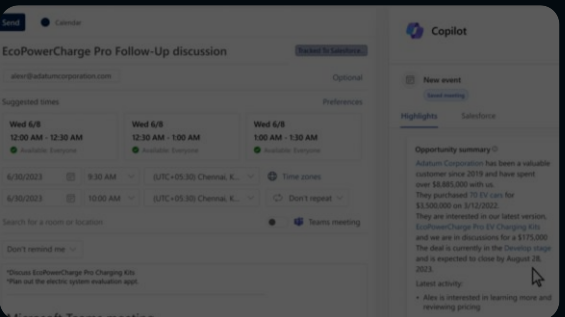
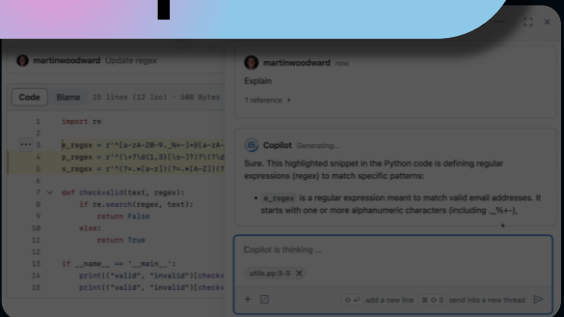
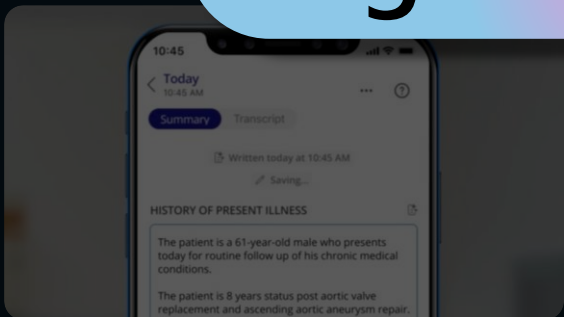
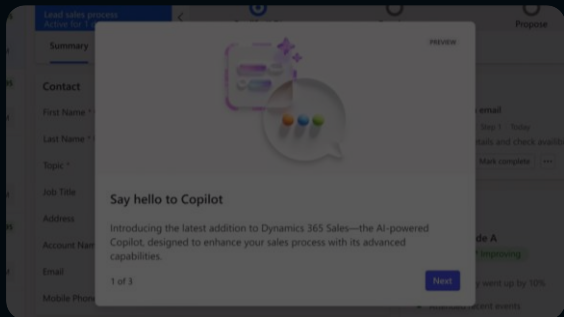
Cloud

Mobile

AI Copilot



# Age of copilots





# Copilot

## Analytics

Power BI Copilot



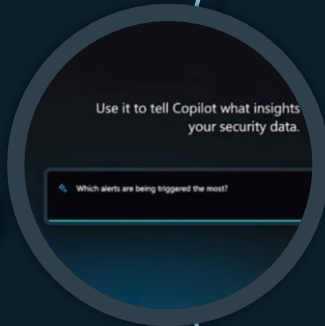
## Software developers

GitHub Copilot

```
1 const fetchRecentFlights = (...args) => {
2   return fetch('https://www.
3
4   headers: {
5     'Content-Type': 'applicat
6
7   },
8
9   .then(response => response.
10  .then(json => {
11    return json;
12  });
13 }
```

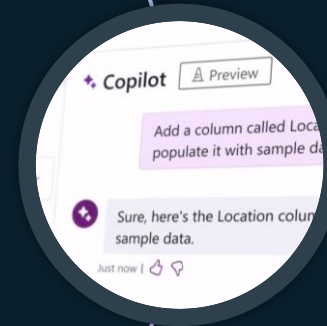
## Security operations

Security Copilot



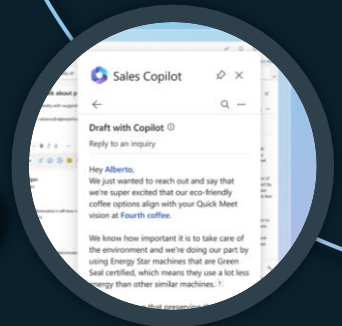
## Domain experts

Copilot in Power Platform



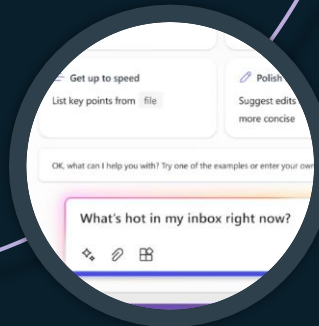
## Sales

Sales Copilot



## Knowledge workers

Microsoft 365 Copilot





Microsoft Graph



Microsoft 365 Apps





# Before

**Contoso Business Reports**  
Reports describe, analyze, and investigate a situation for a particular audience. They have a formal structure and common sub-sections.

Business reports are a type of assignment in which you analyze a situation or problem (either a real situation or a case study) and apply business theories to produce a range of suggestions for improvement.

Business reports are typically assigned to enable you to:

- Examine available and potential solutions to a problem, situation, or issue.
- Apply business and management theory to a practical situation.

**Contoso Monthly Sales Report** Target Completed: ✔

Company Name: **Contoso** Division: **Sales(E)** Time: **Mar-18** Unit: **10,000**

Sales Planned	\$	700.00	Sales Completed	\$	661.00		
Sum	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	
1	Sales: \$ 30.00	2	Sales: \$ 25.00	3	Sales: \$ 28.00	4	Sales: \$ 28.00
5	%: 4.29%	6	%: 3.57%	7	%: 4.00%	8	%: 4.00%
9	Sales: \$ 21.00	10	Sales: \$ 26.00	11	Sales: \$ 23.00	12	Sales: \$ 32.00
13	%: 3.00%	14	%: 3.71%	15	%: 3.29%	16	%: 4.57%
17	Sales: \$ 23.00	18	Sales: \$ 25.00	19	Sales: \$ 27.00	20	Sales: \$ 19.00
21	%: 3.29%	22	%: 3.57%	23	%: 3.86%	24	%: 2.71%
25	Sales: \$ 16.00	26	Sales: \$ 17.00	27	Sales: \$ 12.00	28	Sales: \$ 17.00
29	%: 2.29%	30	%: 2.43%	31	%: 1.71%	32	%: 2.43%
33	Sales: \$ 19.00	34	Sales: \$ 21.00	35	Sales: \$ 19.00	36	Sales: \$ 17.00
37	%: 2.71%	38	%: 3.00%	39	%: 2.71%	40	%: 2.43%

# Now

Bing is powered by AI, so surprises and mistakes are possible. Please share feedback so we can improve! Terms · Privacy

Ads are not targeted based on your workplace identity or chat history. Learn more.

Help me prepare and write a successful sales pitch

Compare online and offline marketing strategies

Business Travel

What's a good place to stay for my upcoming business trip to New York?

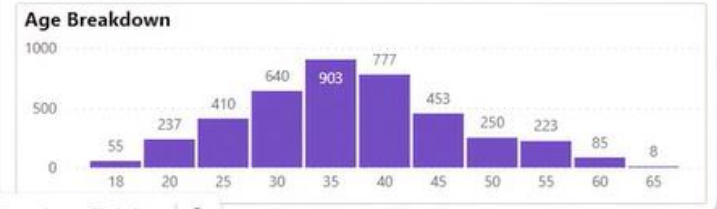
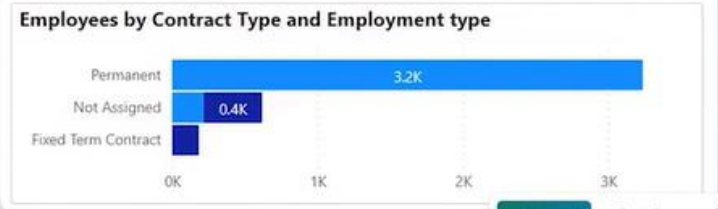
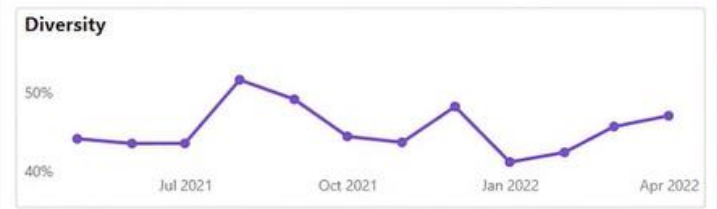
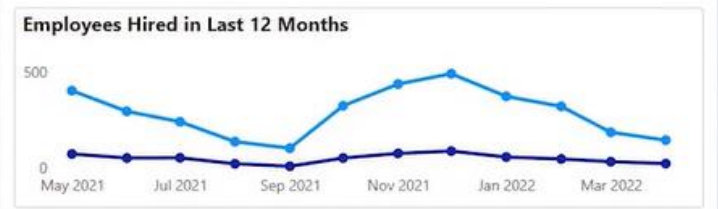
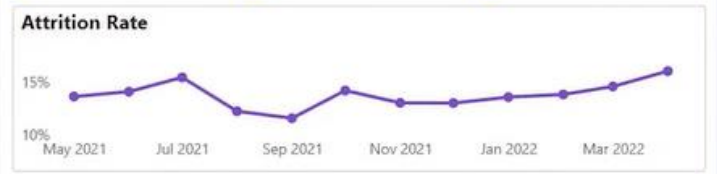
Your personal and company data are protected in this chat

Ask me anything...

0/4000

# Workforce Demographics

Position Type: All | Role: Employee



Keep it | Adjust | Try again | Delete

**Copilot** PREVIEW

Help me build a report summarizing our workforce hiring for the last 12 months. I want it to include the following:

- How many employees we hired broken down by employment type
- An age breakdown of current employees
- The ability to filter by position type and role
- Other interesting breakdowns of hiring by employment type

Here's a new report page summarizing workforce hiring for the last 12 months. It includes key metrics for understanding your workforce demographics like diversity, average age and attrition rate. Remember to check for accuracy.

Explain

Add another page to the report

Add a chart for operations teams

Ask a question or request, or type '/' for suggestions

Examples of use cases?

# What AI is already doing?

## Productivity & job satisfaction



"After a six-week pilot to automate invoice and claims document processing, Volvo deployed a solution that saved the Group more than 10,000 manual hours"

## Cost savings & efficiency



"It's allowed us to optimize the way we work. The team is now able to focus on high-value tasks."

## Customer experience



"The integration of ChatGPT with Microsoft in our controlled cloud environment is a milestone on our way to making our cars the center of our customers' digital lives."

V O L V O

#### Microsoft products and services:

Azure AI services  
Azure AI Document Intelligence  
Azure Data Factory  
Power Automate

[Watch video here](#)

[Read full story here](#)



"We chose Microsoft Azure AI primarily because of the advanced capabilities offered, especially with AI Document Intelligence."

– Malladi Kumara Datta, RPA Product Owner, Volvo Group

### Situation

Volvo Group wanted to support its employees by streamlining invoices and claims document processing. It particularly needed the ability to extract data from images, like photographs and stamps, and to translate documents from and to multiple languages.

### Solution

With Microsoft Azure as its enterprise cloud solution, Volvo Group chose to create a solution using Microsoft Azure AI services and AI Document Intelligence.

### Impact

After a **six-week pilot** and four-month production timeline, Volvo Group launched a solution that simplifies document processing and meets the objectives of data extraction from images and translation. Now in multiple markets, the solution has saved Volvo Group more than **10,000 manual hours**.



IVECO • GROUP  
WE GO BEYOND



### Microsoft products and services:

Azure OpenAI Service

Office 365

“We want people to concentrate on using AI as a tool to solve their problems. It’s our people who are creative—who are responsible and hold the key to producing results with this new superpower—not the AI technology.”

– Fabio Ricciato, *Head of IT Customer Journey & Digital Architecture, Artificial Intelligence and DEX, Iveco Group*

### Situation

Iveco Group, a manufacturer and automotive company headquartered in Italy, determined that AI could tackle wide-ranging challenges and opportunities to reinvent its employee experience. The group recognized the need to quickly provide enterprise-level AI solutions that are not only efficient and user-friendly, but also secure and protective. They wanted to maintain the integrity of their operations, while fostering an acceptance of the new technology among employees.

### Solution

Iveco Group used Azure OpenAI Service to create an internal chatbot called “Chat IVG.” Available in Microsoft Teams, Chat IVG can be used for questions and answers and to extract information from the organization’s own data and documents. Azure OpenAI was a natural choice as Iveco Group uses Microsoft Office 365 and other modern workplace technologies.

### Impact

Chat IVG was introduced to a limited group at first, but word of mouth soon led other employees to request access. Chat IVG went from five to 25 to hundreds of users. **Employees rated Chat IVG 4.7 out of 5** on a Net Promoter Score (NPS) and **chose 5 out of 5 when asked whether they wanted to continue using it.** Now, Chat IVG is fostering huge impact in terms of internal business user experience, augmented productivity levels among different business units, and faster, more effective customer support.

[Read full story here](#)



Mercedes-Benz

#### Microsoft products and services:

Azure OpenAI Service

Azure

[Read full story here](#)



“The integration of ChatGPT with Microsoft in our controlled cloud environment is a milestone on our way to making our cars the center of our customers’ digital lives. Our customers can always rely on us to ensure the best possible protection of their data privacy.”

– Markus Schafer, Member of the Board of Management,  
Chief Technology Officer, Development & Procurement, Mercedes-Benz Group AG

#### Situation

Mercedes-Benz, wanted to integrate a more intuitive voice control system into their existing MBUX Voice Assistant. However, Conversational AI is limited to predefined tasks and responses, and cannot conduct natural conversations with the drivers.

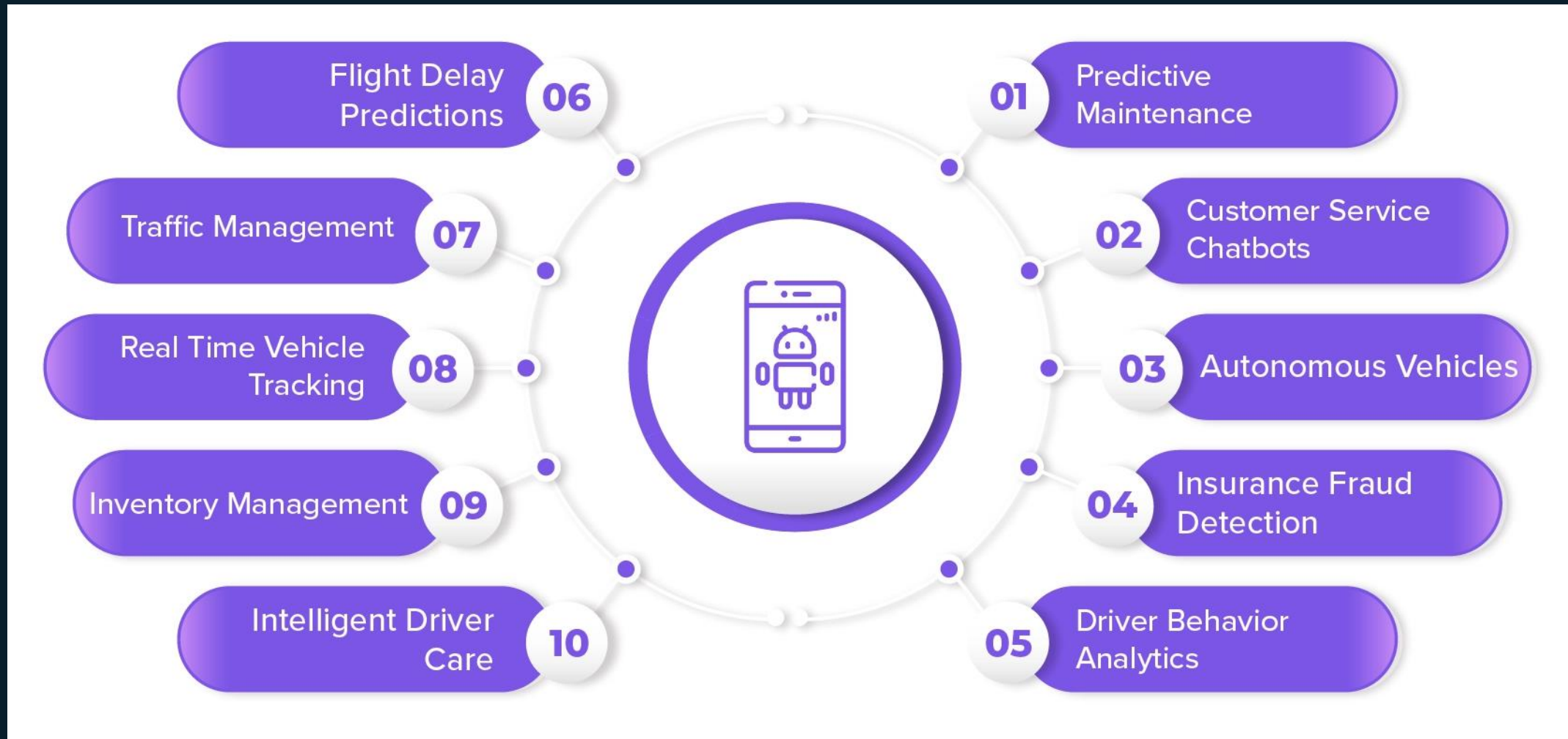
#### Solution

Mercedes-Benz partnered with Microsoft to integrate ChatGPT into their vehicles through Azure OpenAI Service, enabling the vehicles to not only accept natural voice commands but also conduct conversations. The rollout began with a beta program on June 16, 2023, available for over 900,000 vehicles equipped with the MBUX infotainment system.

#### Impact




Drivers can now ask the Voice Assistant for details about their destination, suggest a new dinner recipe, or **answer complex questions**, and receive a more comprehensive answer. This greatly improves the driving experience, allowing drivers to keep their hands on the wheel and eyes on the road, while maintaining data privacy.

# Main AI use cases in the transportation industry





# Main AI use cases in the transportation industry

Industry	Azure OpenAI Top Patterns	Public References
<b>Automotive, Mobility &amp; Transportation</b>	<p><b>Contact Center</b> – Extract rich insights from call transcripts. E2E Call Center analysis: Classification, sentiment, summarization and email generation. Automatically generate responses to customer inquiries. Summary of customer support conversation logs. Improved customer satisfaction. Improve time to resolution.</p> <p><b>Smart Virtual Agents/Customer &amp; Employee Communication</b> – Intelligent automated responses to customers and employees through the value chain. Generate human-like responses for live chat/voice applications.</p> <p><b>Automated Documents Processing</b> – Automate Invoice processing for large volumes using Microsoft Cognitive Services, and Azure OpenAI.</p> <p><b>Incident Reporting &amp; Prediction</b> – Text summarization and pattern recognition to automatically generate reports on equipment and process failures, etc. Generate automated responses and notifications.</p> <p><b>Automated Content Generation</b> – Generative AI can be used to automatically generate content on a variety of topics, saving time and money for content creators. Generate more relevant content with summarization. Improve SEO (search engine optimization).</p>	<p><b>CARmax</b></p> <p><b>BMW Group</b></p>   
<b>Manufacturing &amp; Industrials</b>	<p><b>Contact Center</b> – Extract rich insights from call transcripts. E2E Call Center analysis: Classification, sentiment, summarization and email generation. Automatically generate responses to customer inquiries. Summary of customer support conversation logs. Improved customer satisfaction. Improve time to resolution.</p> <p><b>ChatGPT Enabled Technical Support</b> – Contextual human like responses to customers' technical questions and inquires with better recommendations based on internal and external content databases.</p> <p><b>Customer Service Knowledge Mining</b> – Ingest unstructured and structured data and draw better insights around key issues and patterns.</p> <p><b>Anomaly Detection</b> – Provide NLP queries on the vision anomalies and causes. Use Synthetic Imaging to augment baseline ML training image volumes to improve ML accuracy. Improve quality insurance pass rates and reduce operational costs by catching anomalies faster, reducing amount of inventory that needs to be scrapped.</p> <p><b>Virtual Agents with Copilot</b> – Intelligent automated responses to customers and employees through the value chain. Generate human-like responses for live chat/voice applications.</p>	<p><b>STRABAG</b></p>

The potential is clear  
How will you use AI?

# From testing to enterprise scale AI

## Free



## Built-in



Search and Q&A



Better customer engagement and support



Create and tailor reports in seconds



Better email management and meeting preparation



Better meeting management



Better reading and writing assistance

## AI-Builder



Enriching self-service with conversational AI



Automate answering questions, summarizing documents, and more.



Intuitive low-code development for Everyone

## AI-Models



Azure OpenAI Language Models



Model Catalog / Prompt flow

TEST

BUY

Copilot

DESIGN

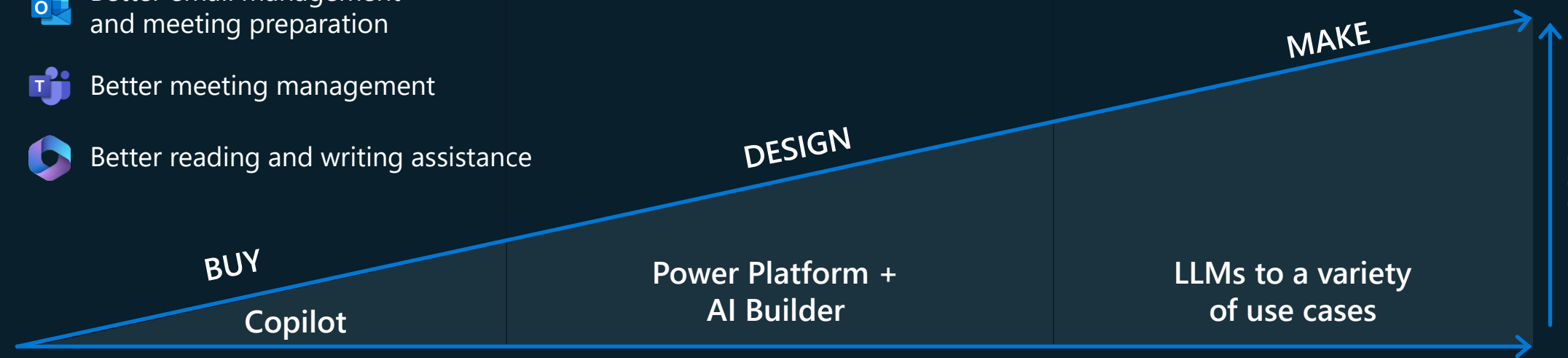
Power Platform + AI Builder

MAKE

LLMs to a variety of use cases

COMPLEXITY

COST



# How you can get started today

Try ChatGPT, Claude,  
prompt engineering

try copilot-ready  
with Microsoft 365

Build your own  
AI-powered copilot

What else?

Obrigado!