



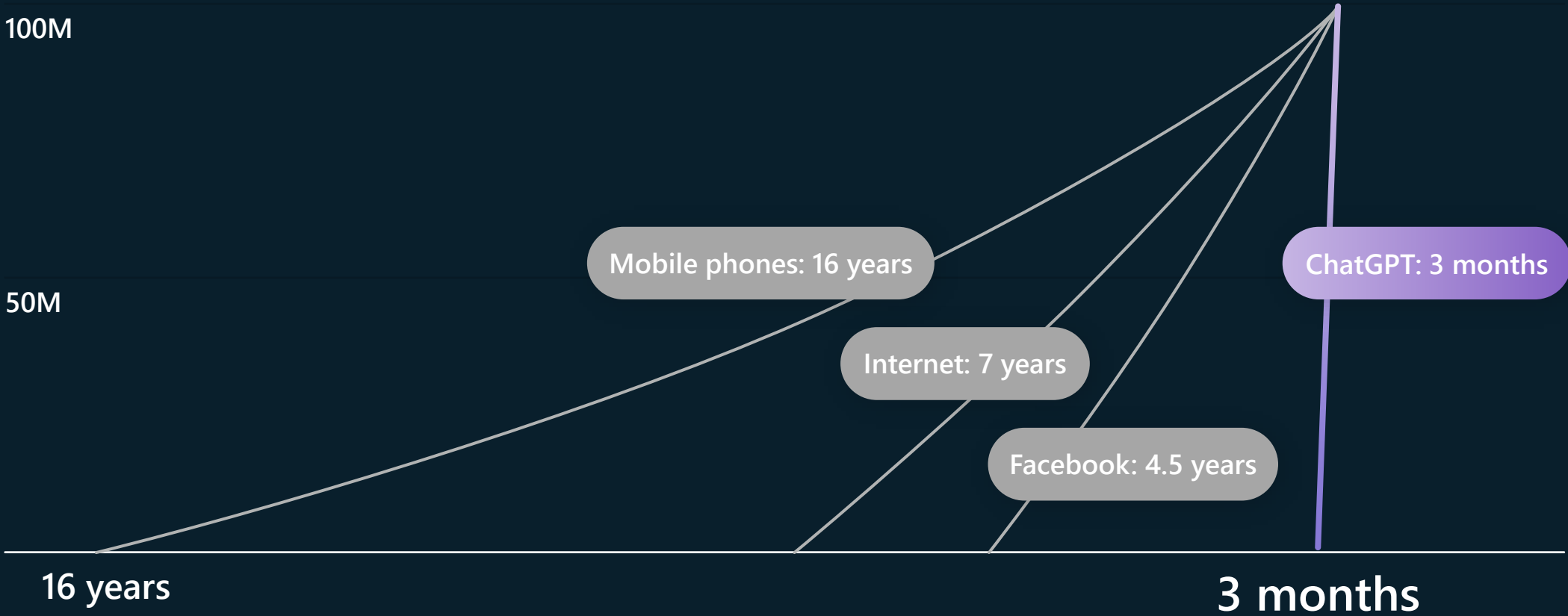
Power your business transformation with AI

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%

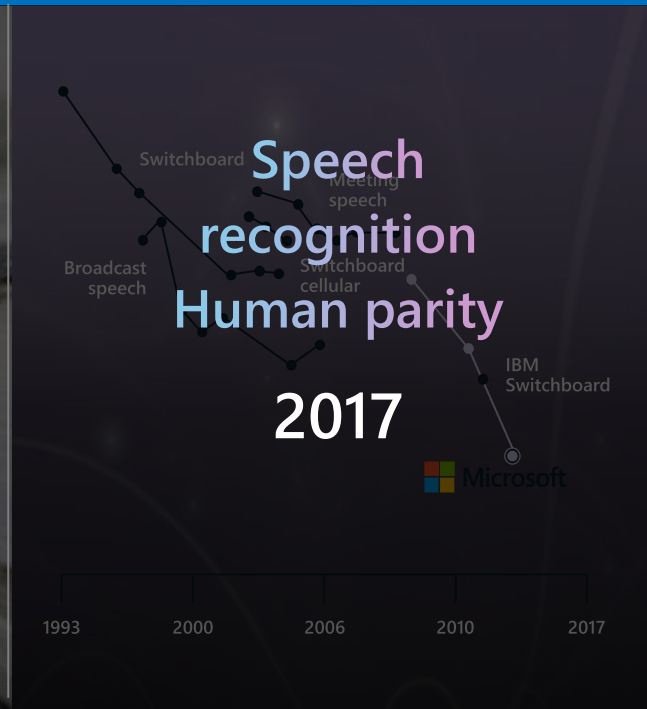
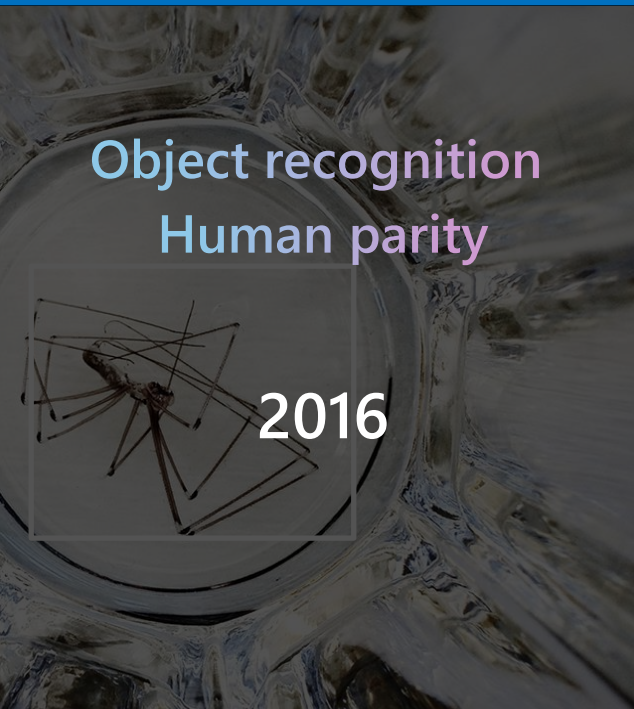
Switchboard speech
recognition test

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

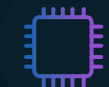
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1959

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

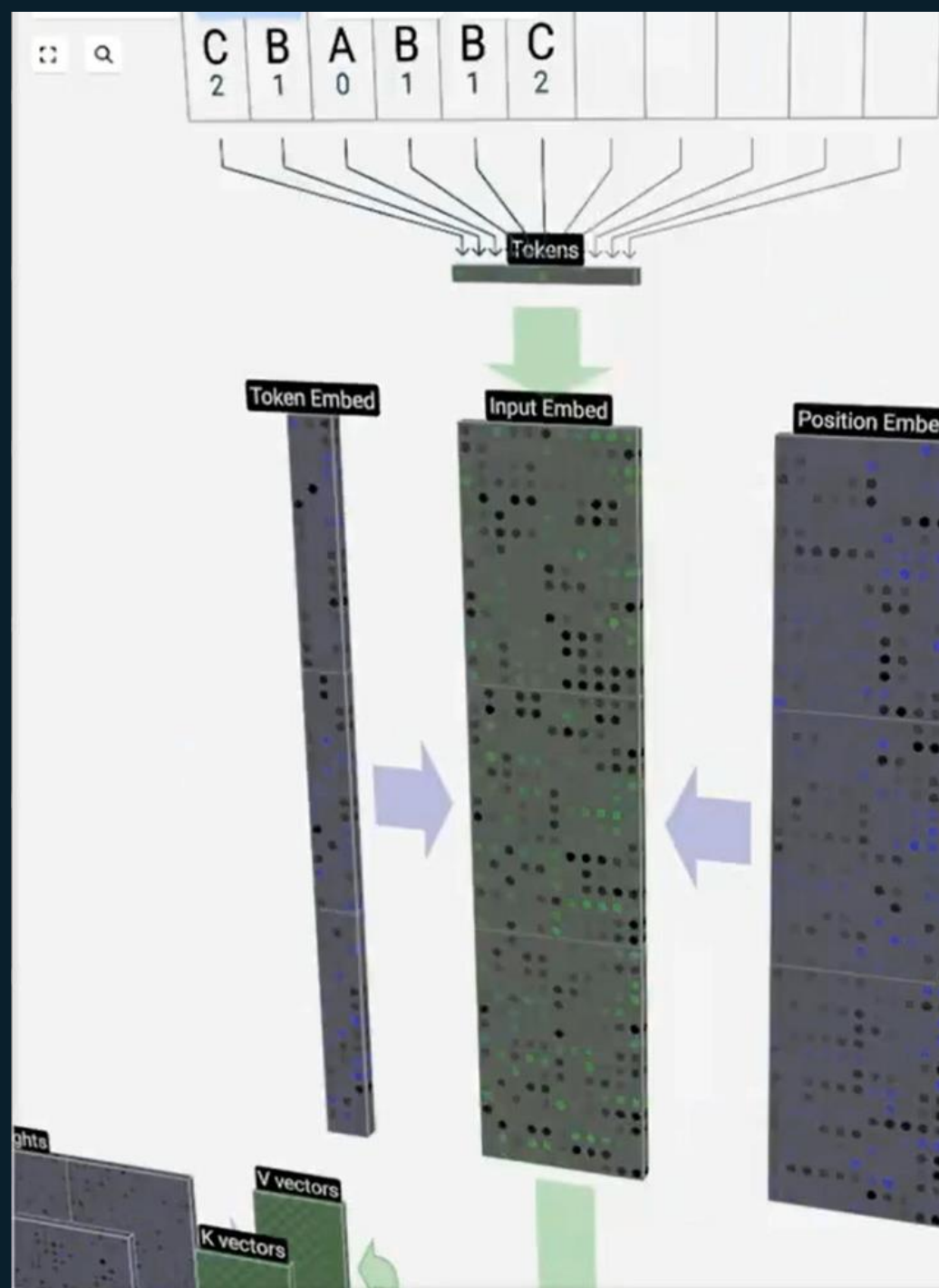
create new written, visual, and auditory content given prompts or existing data.

How LLMs work?

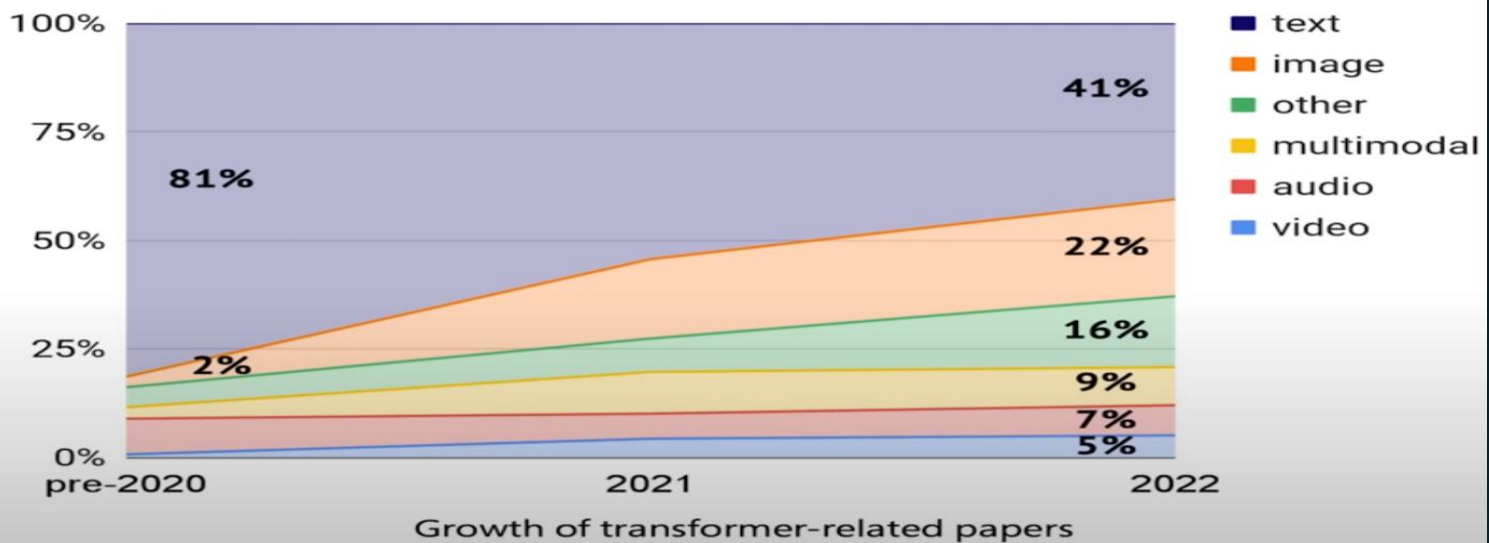
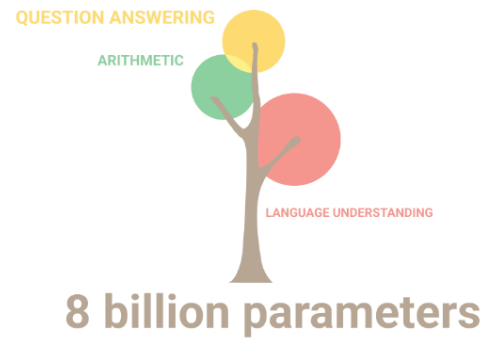
It's raining cats and dogs

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.



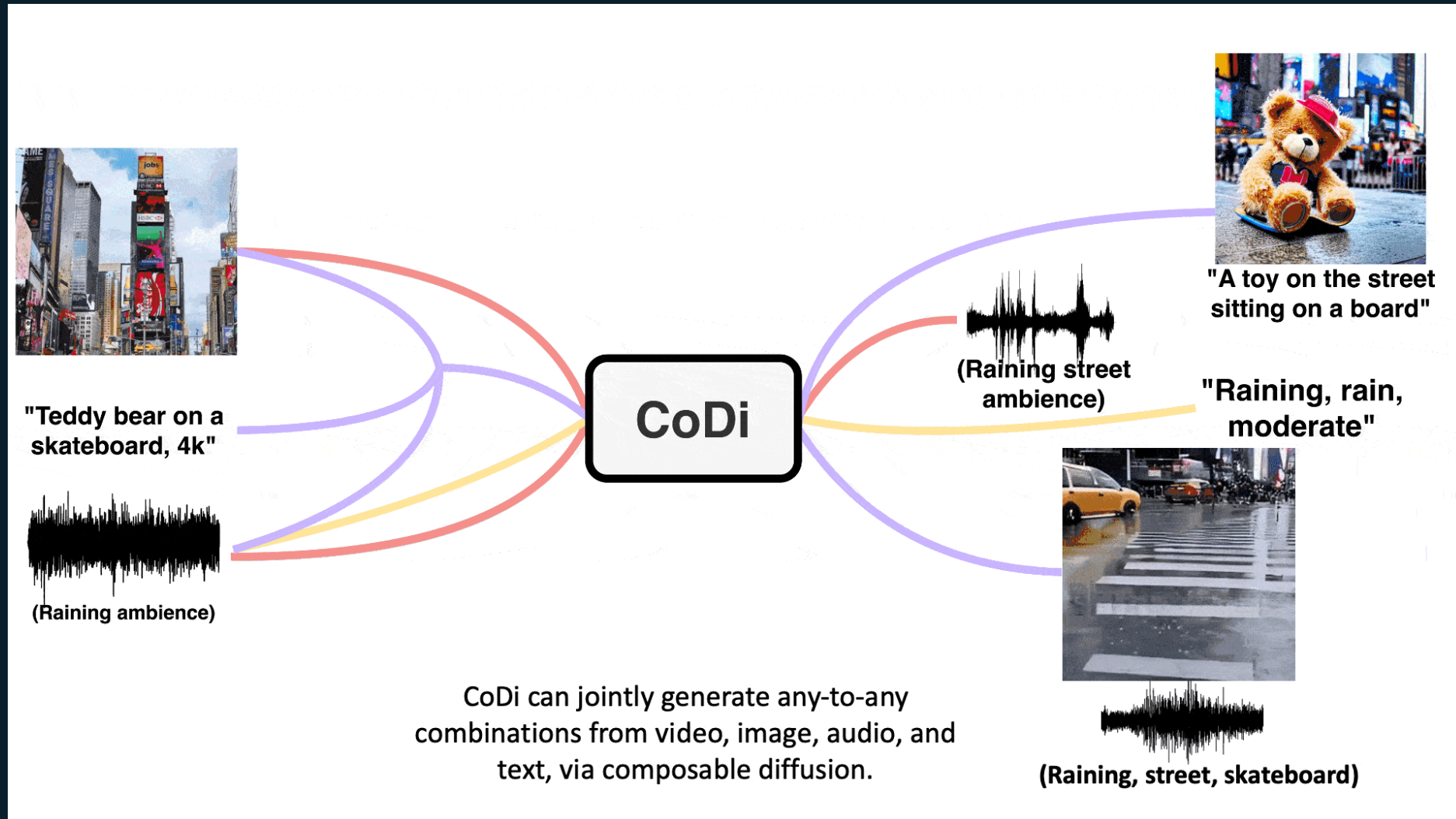
The investments in GenAI

SORA

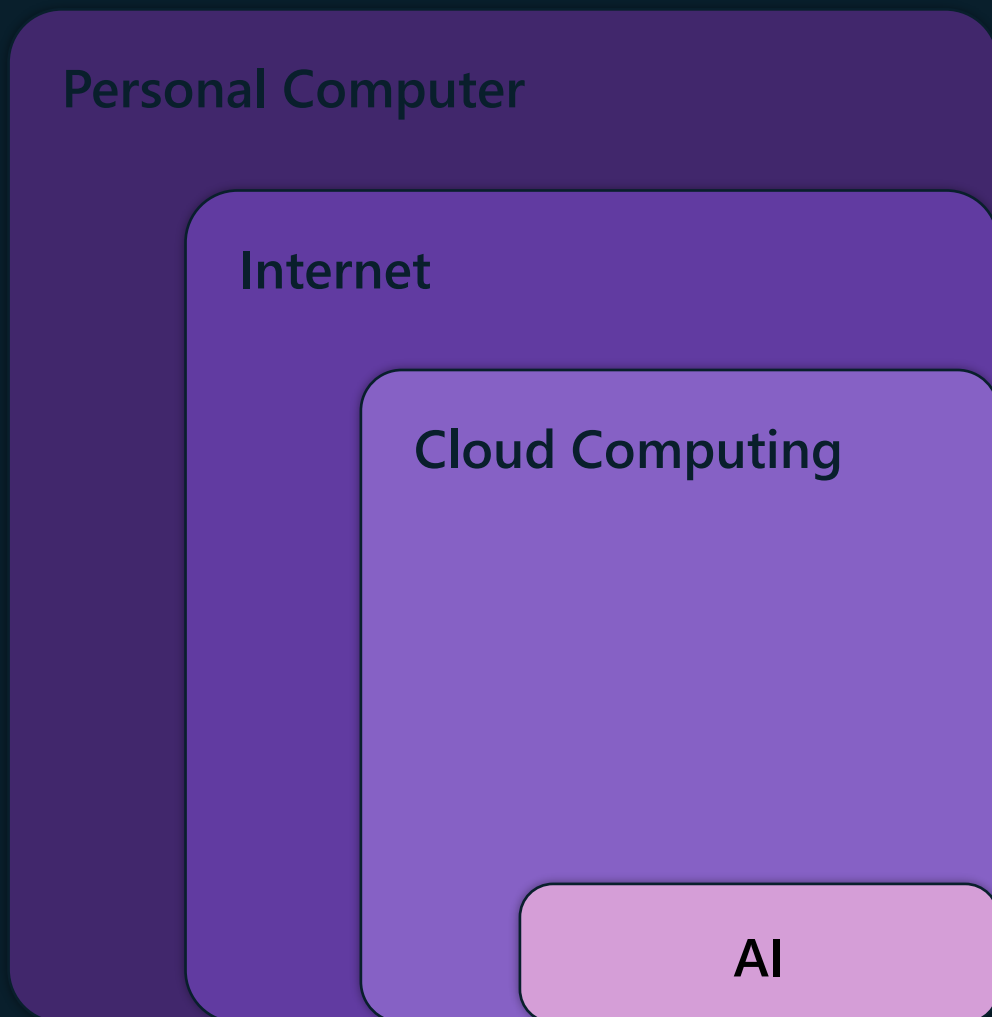
Prompt: A movie trailer featuring the adventures of the 30 year old space man wearing a red wool knitted motorcycle helmet, blue sky, salt desert. cinematic style. shot on 35mm film



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



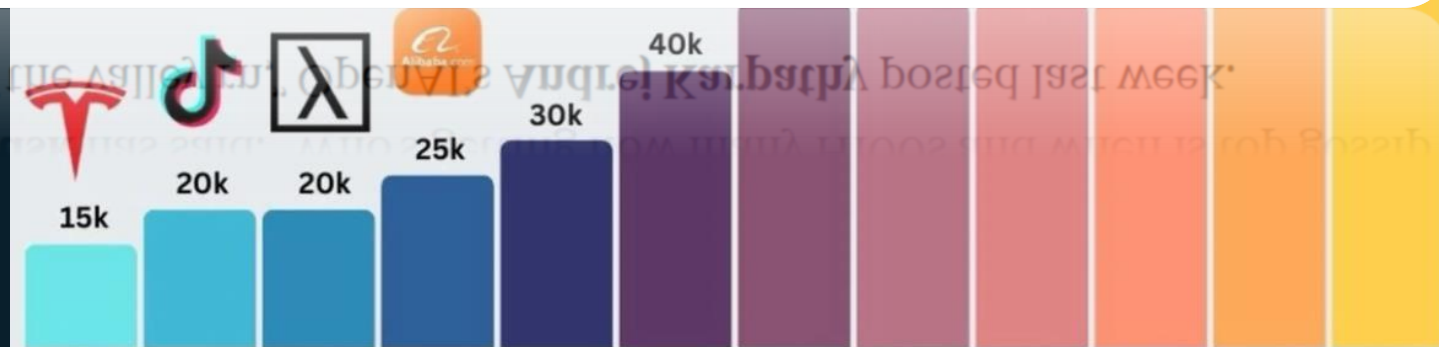
150k 150k



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.

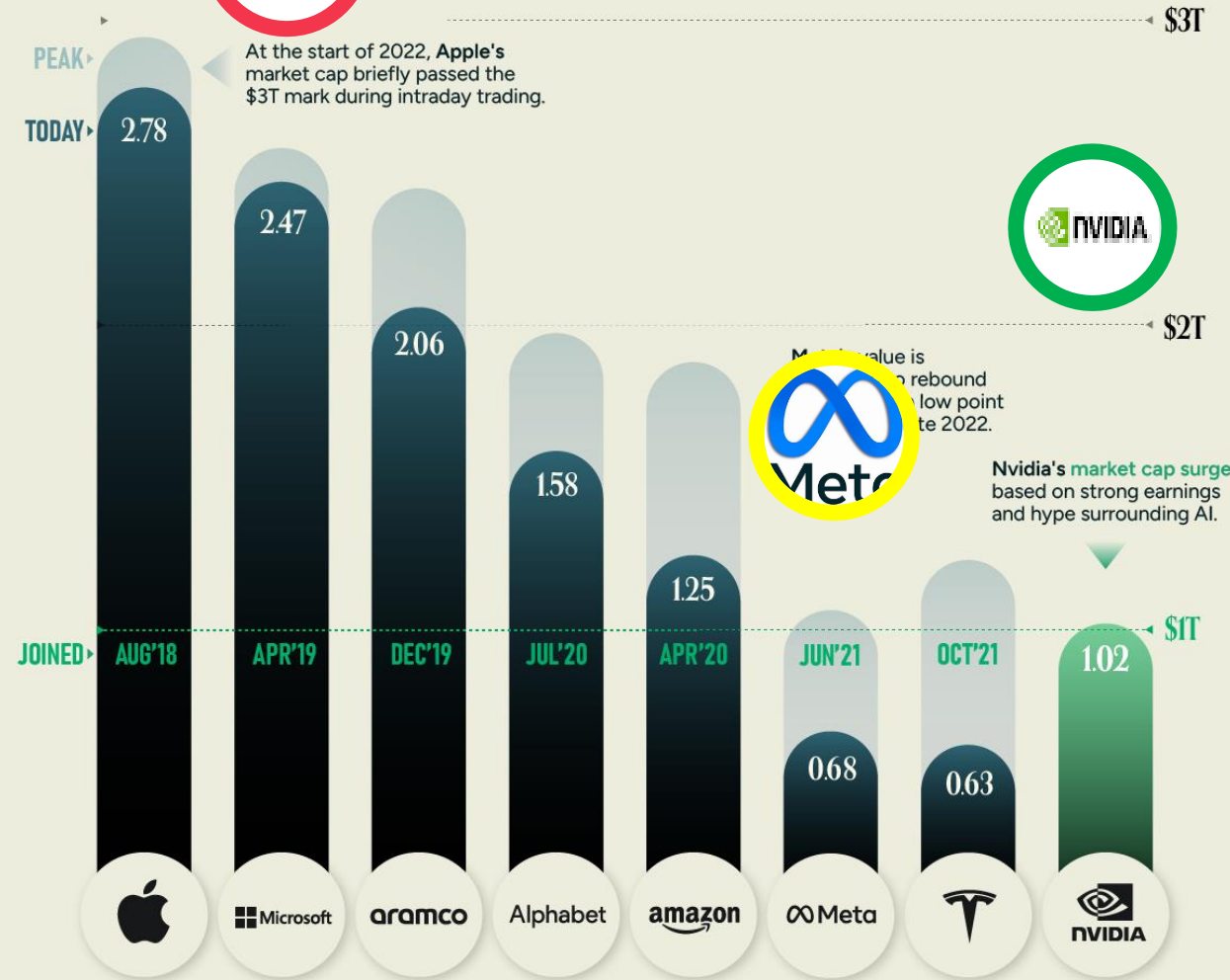


Source: visual capitalist

\$1 TRILLION MARKET CAP CLUB

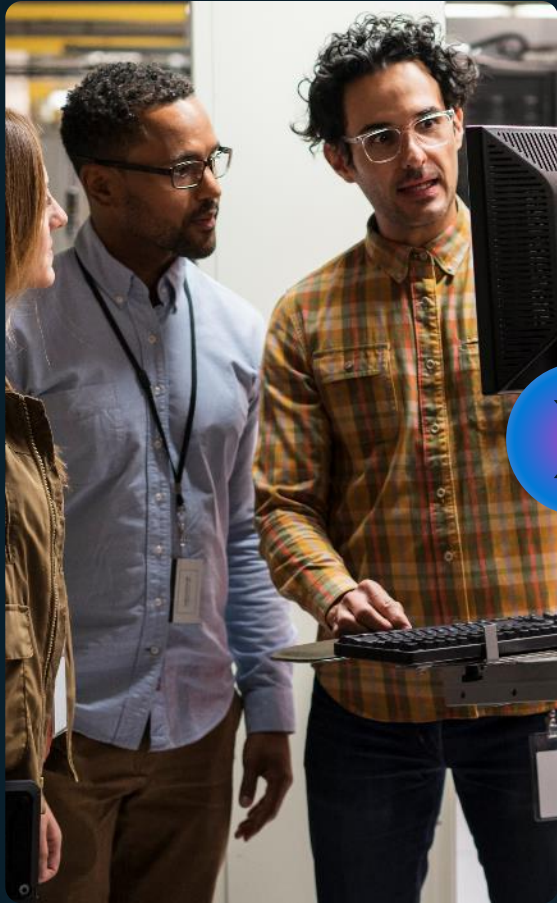


Company to have hit \$1 trillion in market capitalization in one chart



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

Capitol Report

Create a report with Copilot

Describe the report you want, in your own words, and Copilot will create it quickly.

Create a report to identify trends in sales and projections to inform marketing strategies.

Create a report to identify trends in sales and projections to inform marketing strategies.

Sales overview page added

What are the biggest drivers for close %?

Close % drivers page added

Callback within 3 hours (17.75%) has the biggest influence on close %.

Sales Analysis Review

Meeting content

Sales report OK. Capacity plan OK. Marketing plan OK.

Now present all suggested notes and tasks

Suggested notes

- Samira wants to look at the sales report before she and Bob spend the budget on the campaign.
- Bob agrees that they are on track for new product release in December. But they still need to keep an eye on advertisement budget. He will follow up on that.
- Bob explains that they are managing the capacity well. They could be a problem if they get more people. Bob is going to double check on that.

Suggested tasks

- Bob will follow up on advertisement budget.
- Samira will double check with Amanda regarding the CR for the release of the new product.

Can you summarize this presentation?

Here's a summary of the presentation:

- Our mission: VanArsdel is an architectural firm specializing in commercial architecture, aiming to foster collaborative thinking and drive

Welcome to Copilot

Using the power of AI, Copilot can analyze the video to give you insights, summaries, action items, and more.

1 of 3

Create OKRs to get started

Create OKRs from a document

Summarize OKRs on this page

Learn about...

You can always use the prompt guide for suggestions by selecting this button

Generating OKRs from the attached document

Product strategy, FY24.docx

Confidential / Internal only

Draft with Copilot

Describe what you want to write and get an AI-generated draft.

How it works

Say hello and suggest a meeting on Friday

Or pick one of these options

Reply to an inquiry Offer a discount

Copilot

Your everyday AI companion

Write

Help me prepare and write a successful sales pitch

Learn

How do I set achievable

Inbox

Add "remove" feature to ssh-key

Recommended repos on commands error

Check out our Support where the issue was...

Generate

Age of copilots

Say hello to Copilot

Introducing the latest addition to Dynamics 365 Sales—the AI-powered Copilot, designed to enhance your sales process with its advanced capabilities.

Summary

Written today at 10:45 AM

HISTORY OF PRESENT ILLNESS

The patient is a 61-year-old male who presents today for routine follow up of his chronic medical conditions.

The patient is 8 years status post aortic valve replacement and ascending aortic aneurysm repair.

martinwoodward Update regex

Code

```
1 import re
2
3 s_regex = r"^[a-zA-Z0-9_+-.%#-]+@([a-zA-Z0-9-]+)\.[a-zA-Z]{2,6}$"
4 p_regex = r"^[a-zA-Z0-9-]+\.([a-zA-Z]{2,6})$"
5 s_regex = r"^[a-zA-Z0-9_+-.%#-]+@([a-zA-Z0-9-]+)\.[a-zA-Z]{2,6}$"
6
7 def checkValidText_regex(text):
8     if re.search(s_regex, text):
9         return True
10    else:
11        return False
12
13 if __name__ == "__main__":
14    print("Valid:", checkValidText_regex("johndoe@wallip.com"))
15    print("Invalid:", checkValidText_regex("johndoe@wallip.com"))
```

Explain

Copilot Generating...

Sure, this highlighted snippet in the Python code is defining regular expressions (regex) to match specific patterns:

- s_regex is a regular expression meant to match valid email addresses. It starts with one or more alphanumeric characters (including _+-.%#-).

EcoPowerCharge Pro Follow-Up discussion

Suggested times

Wed 6/8	Wed 6/8	Wed 6/8
12:00 AM - 12:30 AM	12:30 AM - 1:00 AM	1:00 AM - 1:30 AM
Available: Everyone	Available: Everyone	Available: Everyone

Opportunity summary

Adatom Corporation has been a valuable customer since 2019 and have spent over \$8,885,000 with us. They purchased 50,000 units for \$1,500,000 on 3/12/2022. They are interested in our latest version, EcoPowerCharge Pro EV Charging Kit, and we are in discussions for a \$175,000 deal is currently in the Develop stage and is expected to close by August 28, 2023.

Suggest content with Copilot

Suggest presentation topic to generate website for reports, meet with your local media.

- Focus on SEO
- Applicable website design
- Search and to relevant websites
- Customer page speed
- Research target audience

Let's build an app. What should it do?

Collect RDVPs Track sales leads List inventory Manage inspections

I need an app for management of company meeting rooms

Security Copilot

Multi stage attack involving phishing and execution

User Jonathan Wolcott with the email address jonathan.wolcott@contoso.com and operating on cont.jonathan.pc received a phishing email titled "Contoso bonus" with a malicious URL that clicked the URL which downloaded a file called "contract.pdf" from...

Incident details

Incident ID: 2356358

Assigned to: Unassigned

Classification: Not set

Categories: Initial access, Execution

First activity: Aug 01, 2023 2:27 AM

How can I adjust my system to get work done?

4/4/2030



Copilot

Analytics

Power BI Copilot



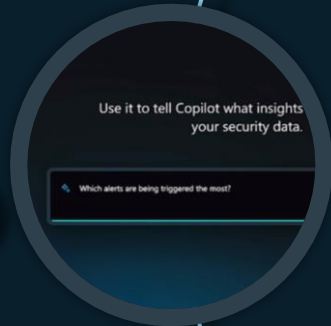
Software developers

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 }
```

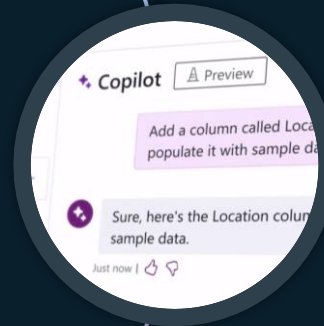
Security operations

Security Copilot



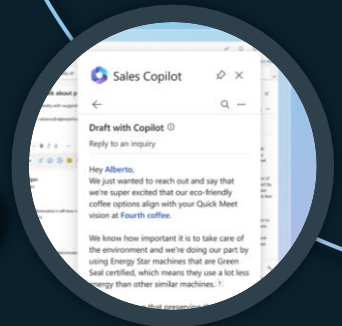
Domain experts

Copilot in Power Platform



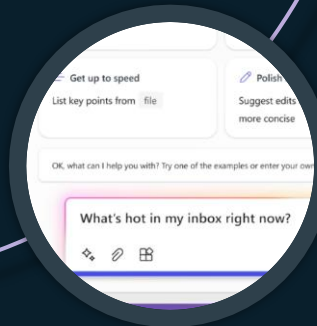
Sales

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%

PROJECT COST TRACKING WORKSHEET

Item	Number	Unit	Quantity	Unit Price	Unit Cost	Unit Margin	Unit Profit
Materials	1000	1000	1000	1.00	1.00	0.00	0.00
Labor	2000	2000	2000	2.00	2.00	0.00	0.00
Overhead	3000	3000	3000	3.00	3.00	0.00	0.00
Profit	4000	4000	4000	4.00	4.00	0.00	0.00

Power BI Dashboard

- Revenue YTD: **\$176.4M**
- Revenue Growth: **1.5%**
- Gross Margin YTD: **\$48.2M**
- Gross Margin: **27.58%**

Monthly Sales Report Table

Month	Revenue	Profit	Margin
Jan	\$120,000	\$30,000	25%
Feb	\$130,000	\$32,500	25%
Mar	\$140,000	\$35,000	25%
Apr	\$150,000	\$37,500	25%
May	\$160,000	\$40,000	25%
Jun	\$170,000	\$42,500	25%
Jul	\$180,000	\$45,000	25%
Aug	\$190,000	\$47,500	25%
Sep	\$200,000	\$50,000	25%
Oct	\$210,000	\$52,500	25%
Nov	\$220,000	\$55,000	25%
Dec	\$230,000	\$57,500	25%
Total	\$2,100,000	\$525,000	25%

Now

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?

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.

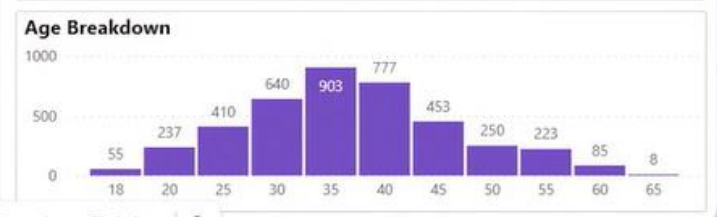
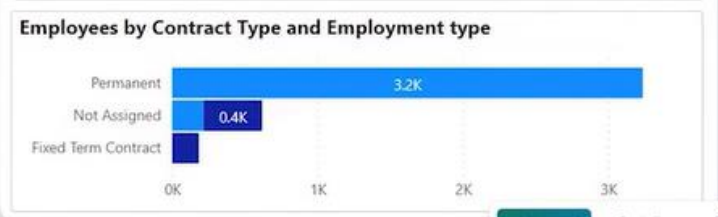
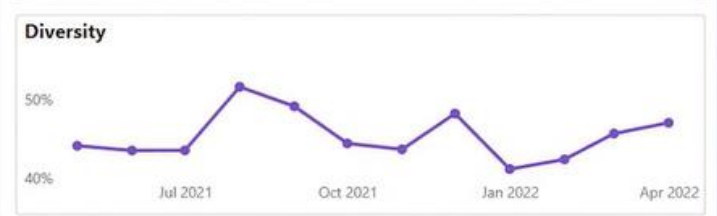
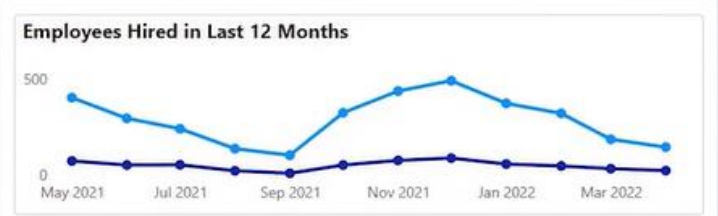
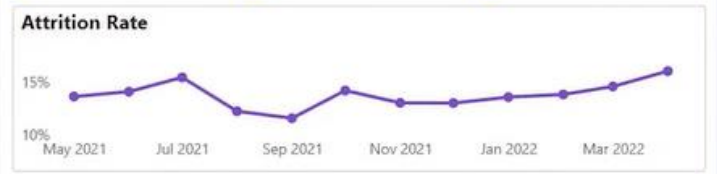
Your personal and company data are protected in this chat

Ask me anything...

0/4000

Workforce Demographics

Position Type: All | Role: Employee



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](#)



Microsoft products and services:

Azure OpenAI Service

Azure

“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

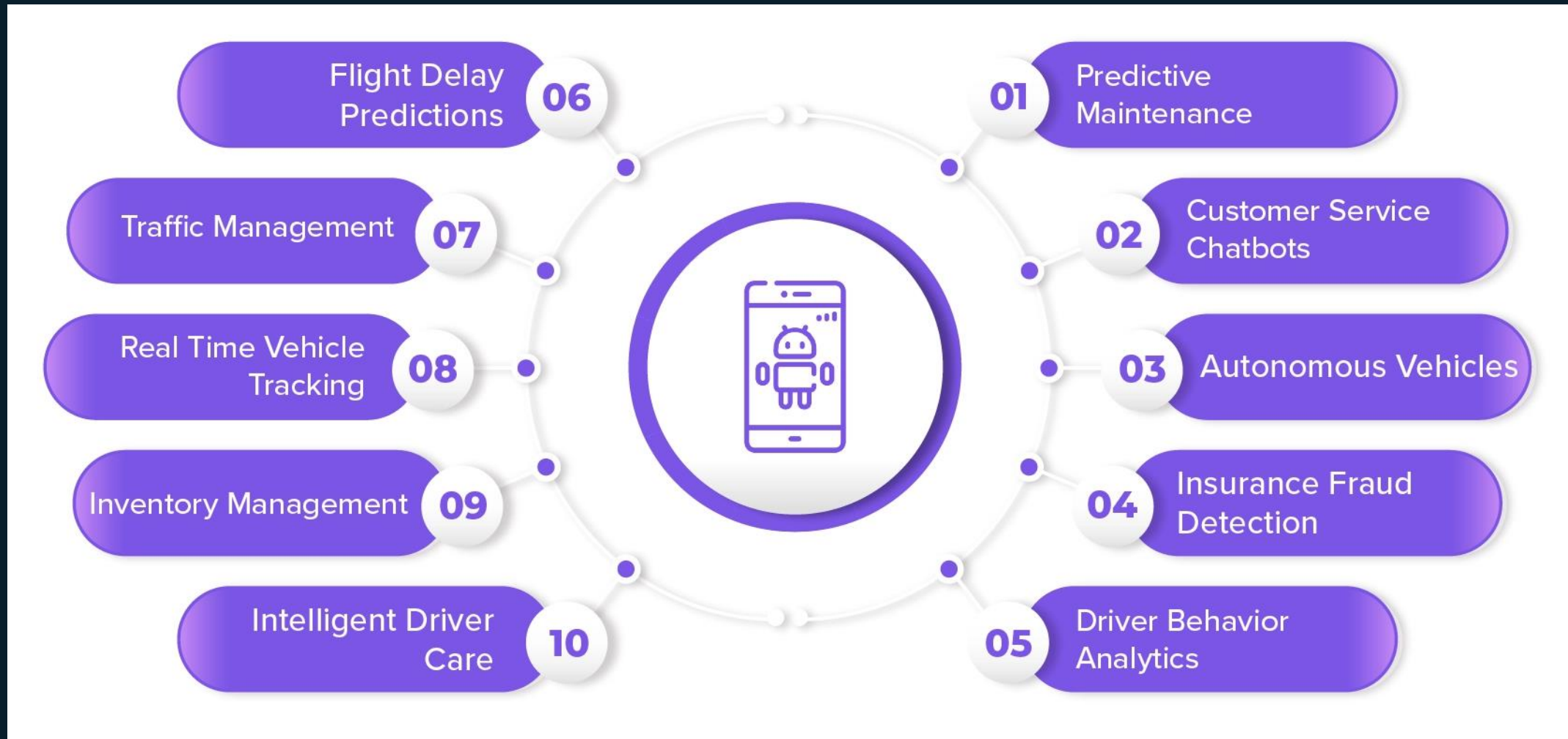
Mercedes-Benz partnered with Microsoft to integrate ChatGPT into their vehicles through Azure OpenAI Service, enabling the vehicles to not only accept natural voice commands but also conduct conversations. The rollout began with a beta program on June 16, 2023, available for over 900,000 vehicles equipped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

[Read full story here](#)

Main AI use cases in the transportation industry



Main AI use cases in the transportation industry

Industry	Azure OpenAI Top Patterns	Public References
Automotive, Mobility & Transportation	<p>Contact Center – 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>Smart Virtual Agents/Customer & Employee Communication – Intelligent automated responses to customers and employees through the value chain. Generate human-like responses for live chat/voice applications.</p> <p>Automated Documents Processing – Automate Invoice processing for large volumes using Microsoft Cognitive Services, and Azure OpenAI.</p> <p>Incident Reporting & Prediction – Text summarization and pattern recognition to automatically generate reports on equipment and process failures, etc. Generate automated responses and notifications.</p> <p>Automated Content Generation – 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>CARmax</p> <p>BMW Group</p>   
Manufacturing & Industrials	<p>Contact Center – 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>ChatGPT Enabled Technical Support – Contextual human like responses to customers' technical questions and inquires with better recommendations based on internal and external content databases.</p> <p>Customer Service Knowledge Mining – Ingest unstructured and structured data and draw better insights around key issues and patterns.</p> <p>Anomaly Detection – 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>Virtual Agents with Copilot – Intelligent automated responses to customers and employees through the value chain. Generate human-like responses for live chat/voice applications.</p>	<p>STRABAG</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

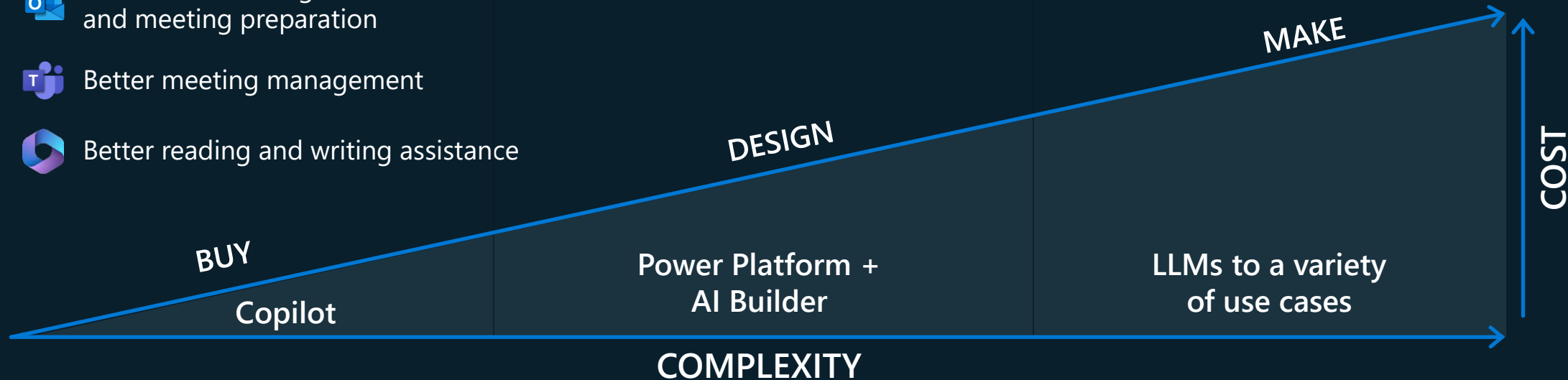
Power Platform +
AI Builder

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!