

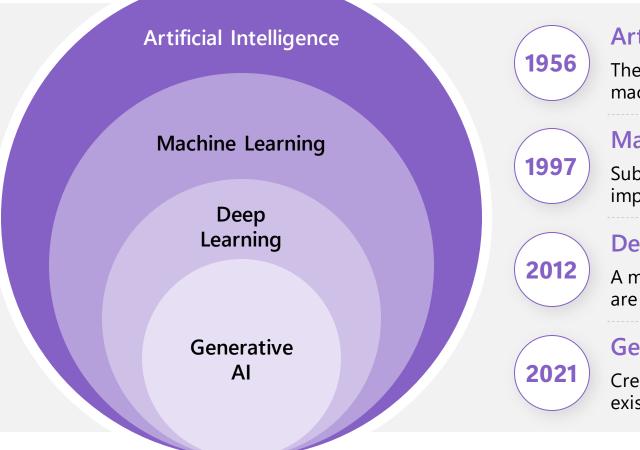
# Macquarie Generative Al Hack

Dave Glover Principle Cloud Advocate @ Microsoft

LinkedIn: David Glover GitHub: @gloveboxes



# The journey continues with generative AI



## **Artificial Intelligence**

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

## **Machine Learning**

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

## **Deep Learning**

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

## **Generative Al**

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

## **Microsoft and OpenAl partnership**



Ensure that artificial general intelligence (AGI) benefits humanity

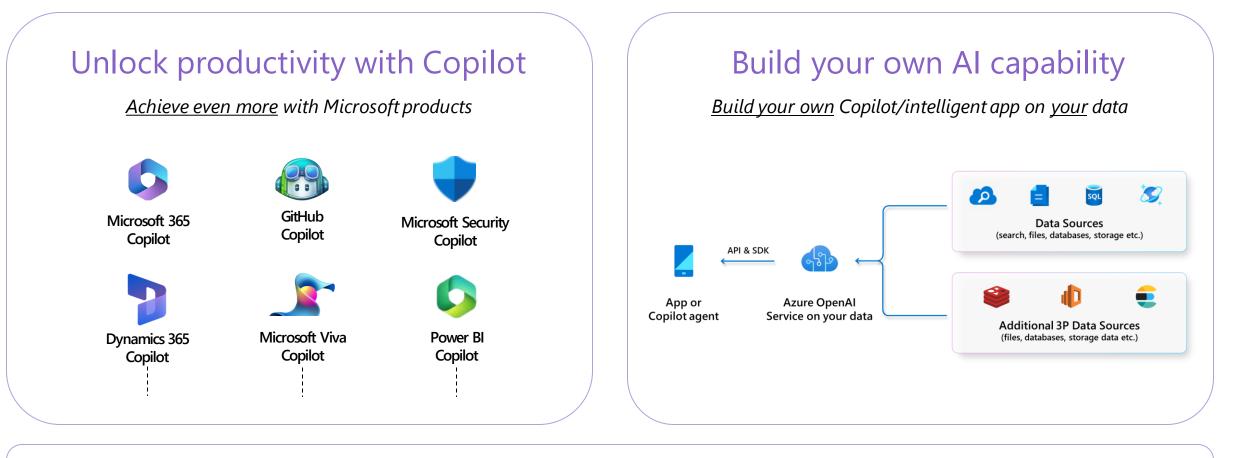


Empower every person and organization on the planet to achieve more

## **Azure OpenAl Service**

GPT-4 & GPT-3.5-Turbo	Chat Completions	DALL·E 3	Whisper
Text	Conversation	Image	Transcription & Translation

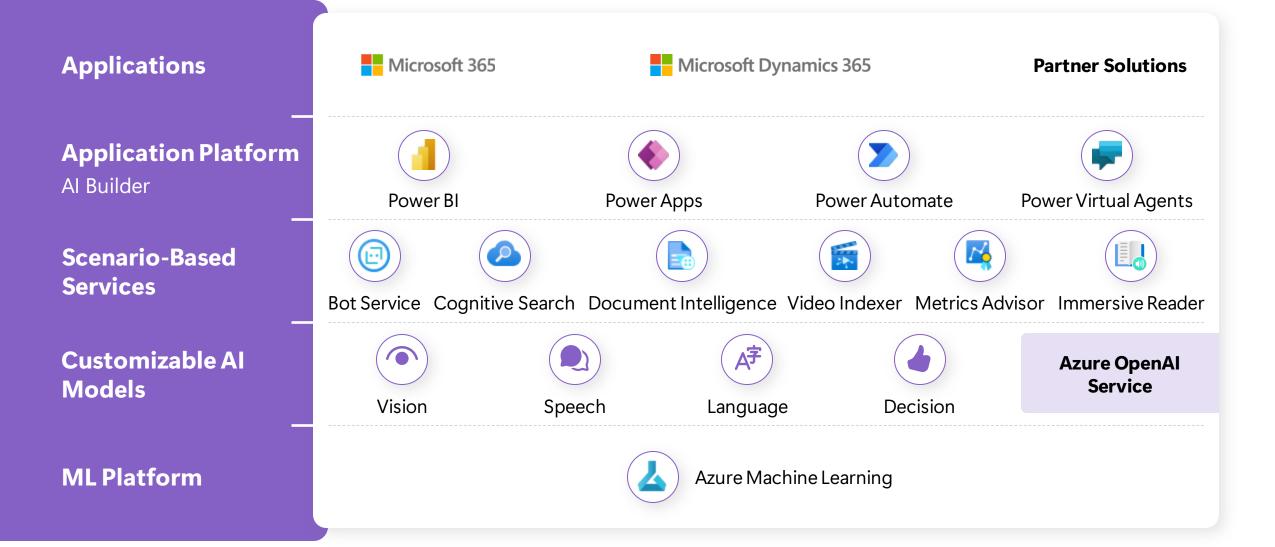
# **Microsoft AI Imperatives**



## Safeguard your business and data

We are not just a cloud company or a devices company or a software company. We are an AI company. AI is at the core of our vision for empowering every person and every organization on the planet to achieve more" - Satya Nadella

# **Microsoft is powered by Azure Al**



## **Generative AI use cases**

## ↑ Value

#### **Automation**

Automated repetitive tasks to streamline and be more productive

#### Personalization

Tailor interactions with individualized information to result in personalized output/recommendations

### Data driven decisioning

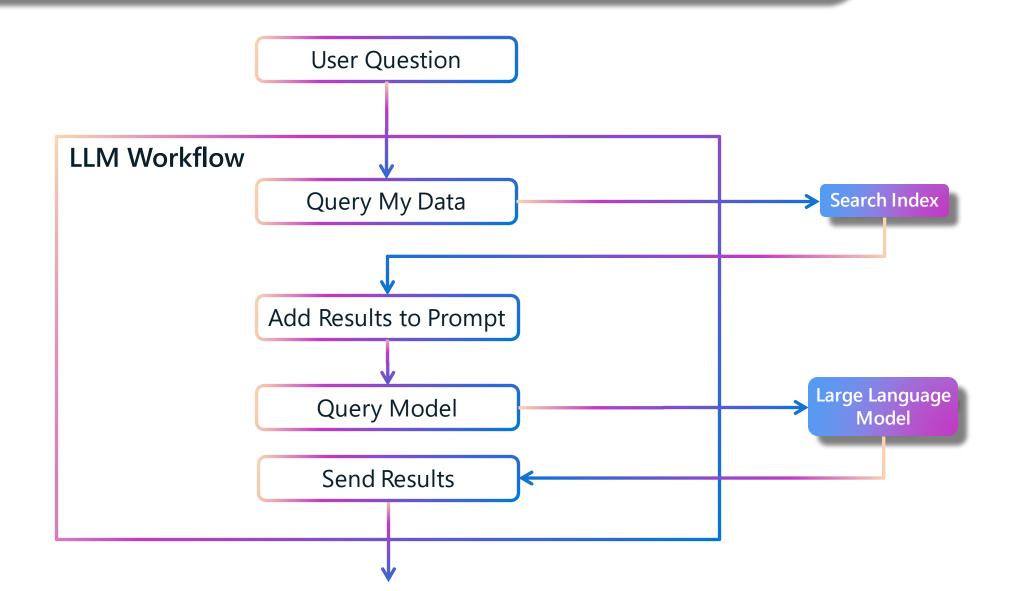
Analyze and interpret data to uncover patterns, identify trends to gain valuable insights

#### Summarization and Q&A

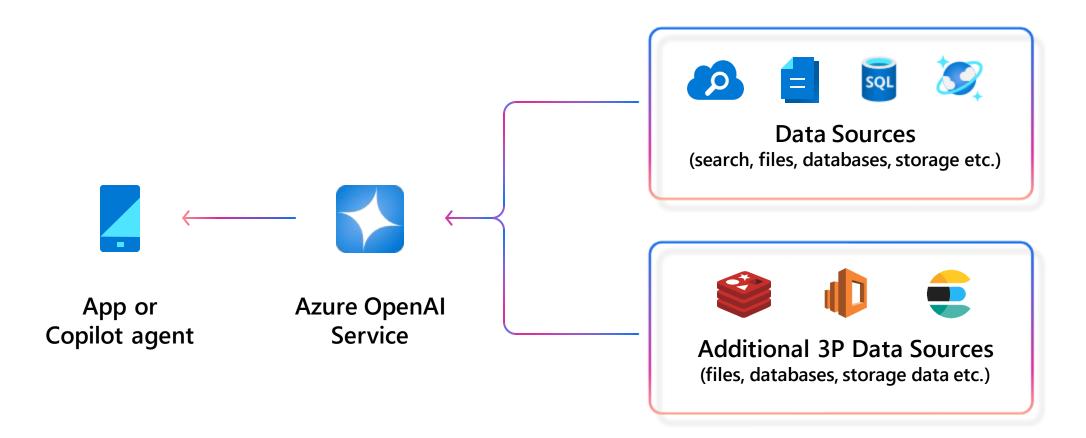
Summarize massive quantities of information for easier consumption & communication

Complexity

## **Retrieval Augmented Generation**



## Bring your own data



# Azure Al Portfolio

## **Azure Al Studio**

Unified user interface (UI), SDK, CLI

Azure Al Services Vision Speech Language / Translatio Document Intelligence Azure OpenAl Content Safety	Vactor	h mented (RAG) ic	Azure Machine Learning Ground Evaluate Deploy Monitor MLOps / LLMOps Responsible AI Dashboard	Comprehensive model catalog Production ready lifecycle
Turing GPT Florence	-4 and GPT 3.5 Turbo Whisper	DALL-E Embeddings	Meta Llama 2 Hugging Face	Safe and Responsible AI
	— Azure Infras	tructure —	/	

One place to

**AI solutions** 

build and deploy



# **Getting started**

## **Azure OpenAl Transparent Proxy**

## **Azure OpenAl Transparent Proxy Access**

- Setup
  - <u>https://workshop.globalai.community/Setup</u>
- Event Code
  - ·MAC56YH

API-KEY is emailed to you

# The Playground (like) experience

<b>Chat</b> Image		MAC56YH <u>Workshop</u>
System Message	Chat Session	Configuration
You are an Al assistant that helps people find		hello
information.		1024
		Accepted Value: 1 - 2048
	Hello! How can I assist you today?	Temperature
		0.7
	what is the	Accepted Value: 0 - 1 meaning of life
Save Changes 🖺		Тор Р
		0.95
	The meaning of life is a complex and subjective topic that has been contemplated by philosophers, theologians, and individuals throughout history. Different people and	Accepted Value: 0 - 1
	cultures have different perspectives on this question. Some believe that the meaning of life is to seek happiness	OpenAl Functions
o	and fulfillment, while others find meaning in personal relationships, achieving goals, or making a positive impact	auto
OpenAl Functions	on the world. Ultimately, the meaning of life may vary for each individual based on their beliefs, values, and experiences.	Finish Reason: stop Completion Tokens: 91
[]	Type user query here (Shift + Enter for new line)	Send > Prompt Tokens: 46 Total Tokens: 137
		Response Time: 1161 ms

# **SDK Support**

- API-KEY: As requested.
- ·OpenAl Proxy Endpoint:
  - <u>https://playground.globalai.community/v1/api</u>
- Models
  - $\cdot$  gpt-3.5-turbo: Chat, Function calling, BYO Data
  - · davinci-002: text
  - $\cdot text-embedding-ada-002$
  - dall-e 2 & 3

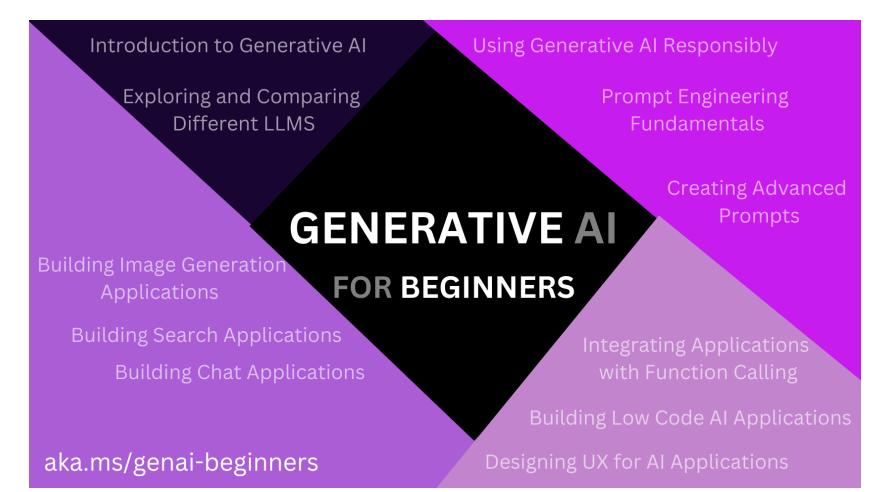


# <u>https://github.com/microsoft/azure-openai-</u> <u>service-proxy/tree/main/examples</u>

- Chat completions
- Function calling
- BYO Data
- Embeddings
- Dall-e

## **Generative AI for Beginners**

## https://microsoft.github.io/generative-ai-for-beginners





# www.bing.com - Chat

Draw a futuristic transparent laptop computer playing a Simpsons video surrounded by blue sky and a bright sun shining

# **Bing Dall-e-3 image generation**



