



# AI & Copilot in the Real World

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# Welcome to Country

DESIGNED IN PARTNERSHIP WITH FIRST NATIONS ARTISTS ACROSS AUSTRALIA & AOTEAROA:  
LALA GUTCHEN (TORRES STRAIT), KOBİ SAINTY (AUSTRALIA), TAWHANGA RIKĀ (AOTEAROA)

# Agenda

GenAI Refresh

Use Cases

Customer Case  
Studies

ISV Success

GenAI Ecosystem & Refresh

Deeper dive into use case identification for  
Azure AI + Copilot

See how customers are building using Azure AI  
+ Copilot

Hear from ISV Success

# Microsoft is powered by Azure AI

## Applications



## Partner Solutions

## Application Platform AI Builder



Power BI



Power Apps



Power Automate



Copilot Studio

## Scenario-Based Services



Bot Service



Cognitive Search



Document Intelligence



Video Indexer



Metrics Advisor



Immersive Reader

## Customizable AI Models



Vision



Speech



Language



Decision

Azure  
OpenAI  
Service

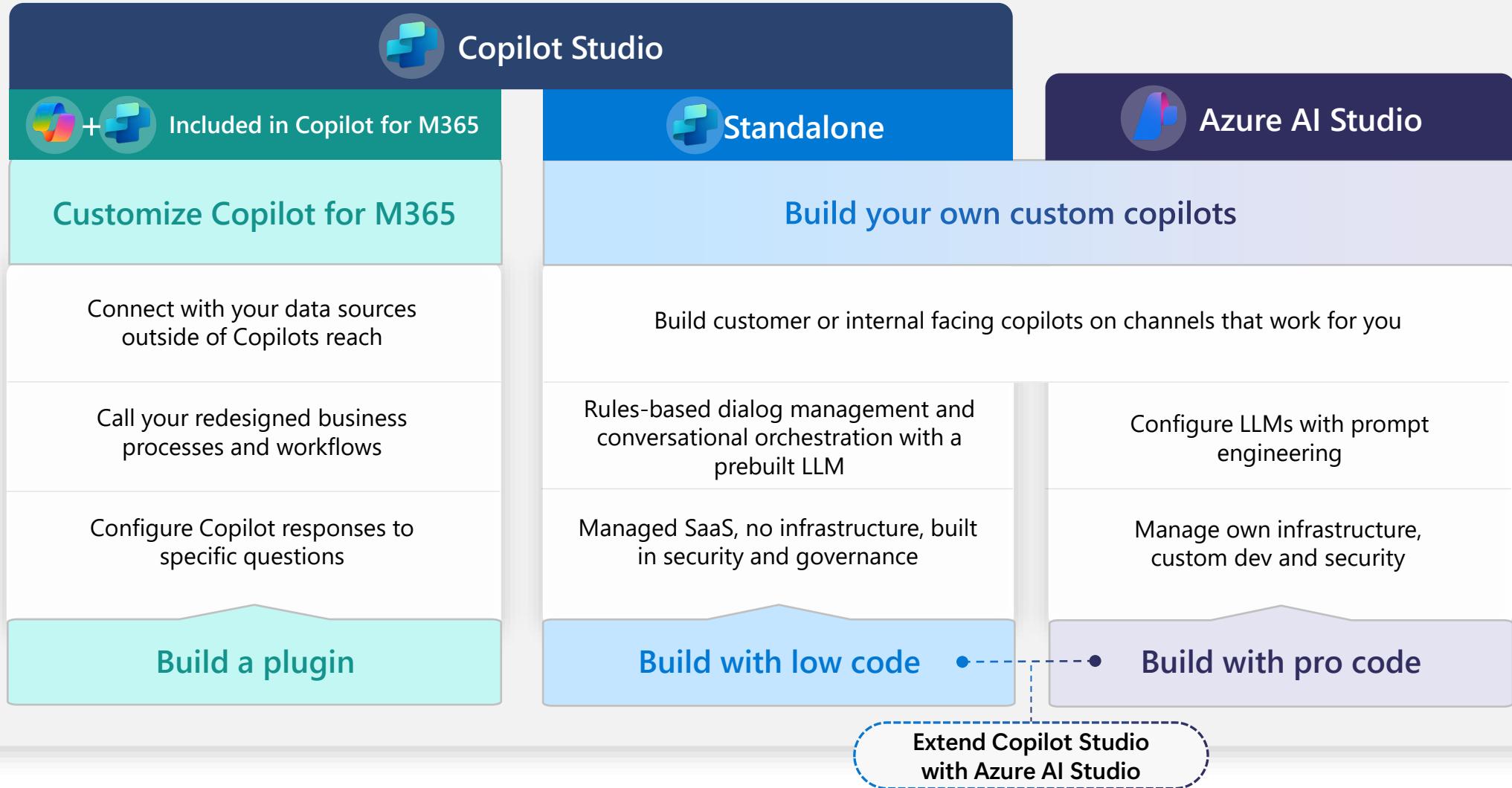


## ML Platform



Azure Machine Learning

# Different building journeys for different needs



# Azure OpenAI Service

GPT-4

GPT-4-Turbo

GPT-3.5-Turbo

DALL·E 3

New: GPT-4 for Vision

*Generative Text Models, with varying capabilities and uses*

*Generative Image Model*



Deploy on your  
own data



Provisioned  
throughput units  
(PTUs)



Assistants, Functions  
and Plugins

# Azure AI Studio



Build and train your own models



Ground Azure OpenAI Service and OSS models using your data



Built-in vector indexing



Retrieval augmented generation made easy

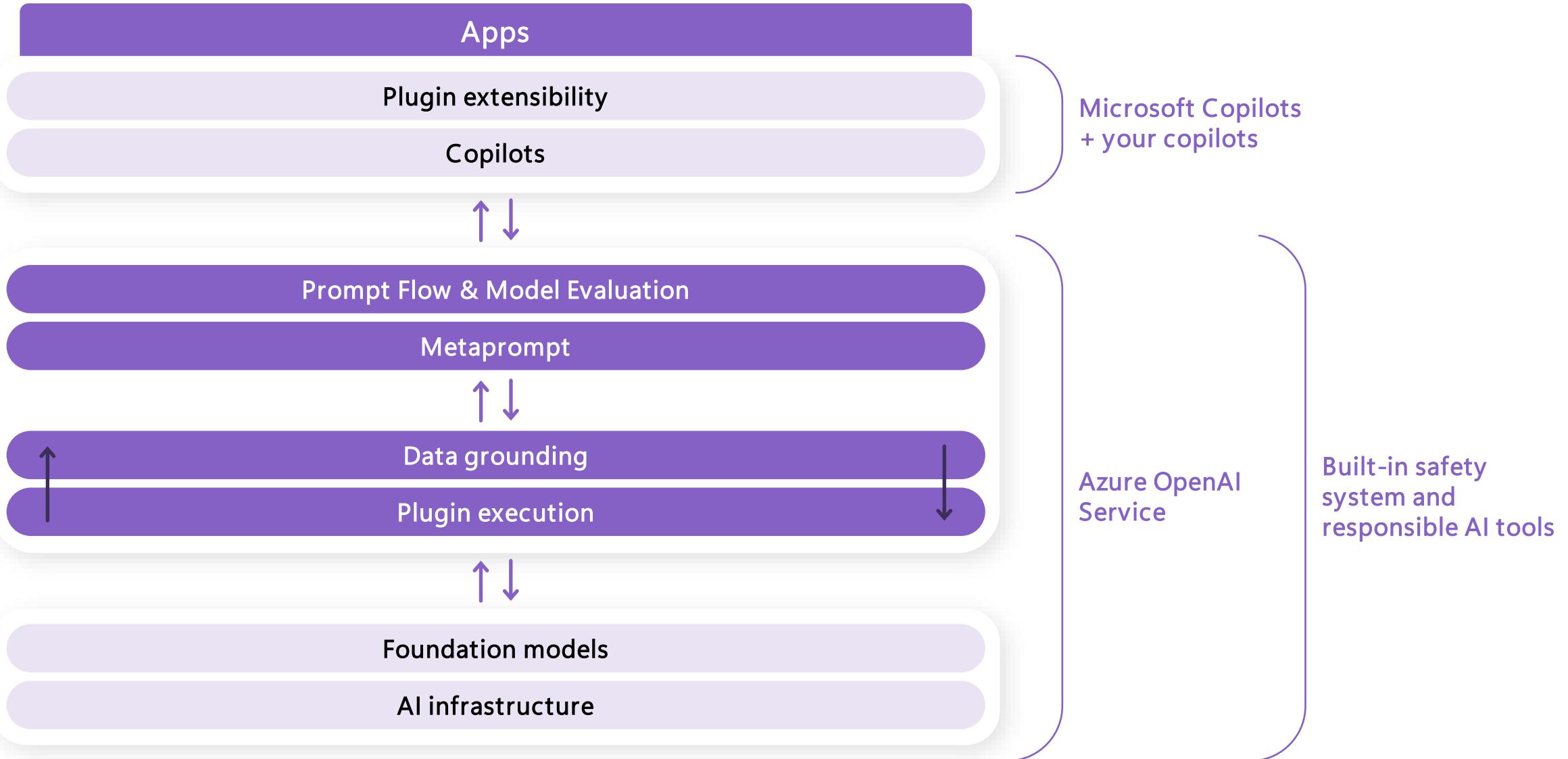


Create prompt flows



AI safety built-in

# It's time to develop your own custom copilots



# Azure OpenAI on your data



Connect or ingest your data



Ground Azure OpenAI models using your data



Retrieval augmented generation made easy



Restrict responses to your data

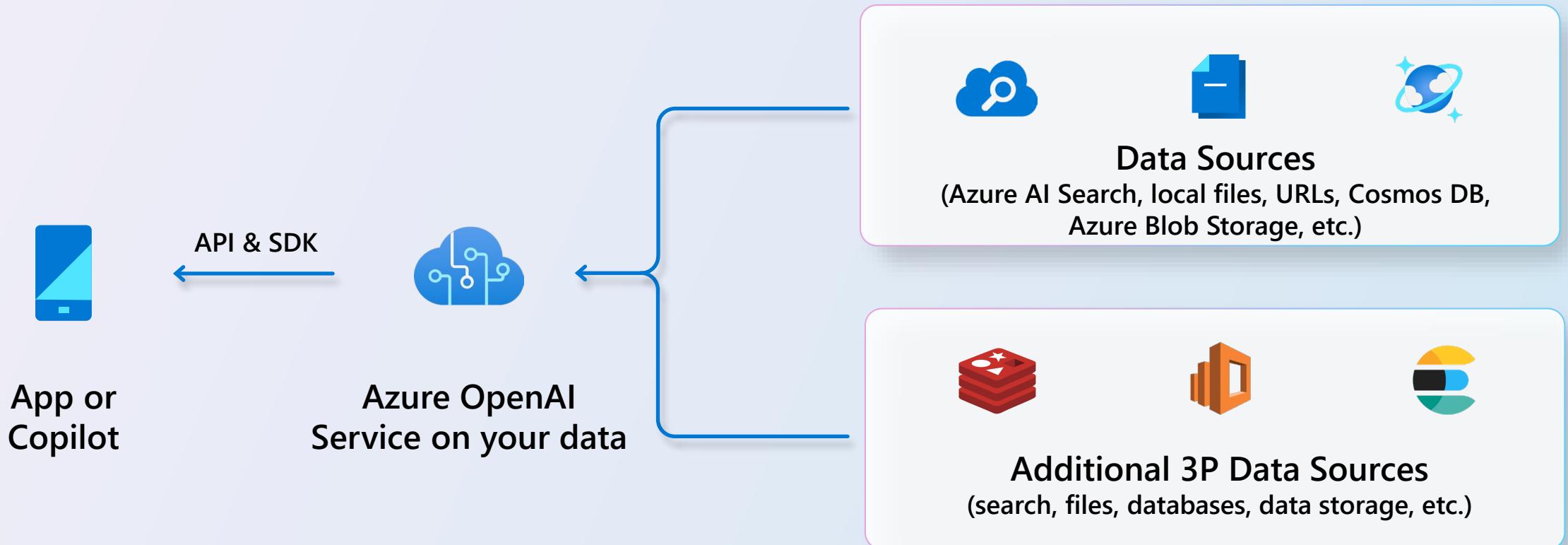


Enterprise grade security including private network, VPN, document level access control, etc.



Easy deployment as a copilot

# Azure OpenAI on *your* data



# Connect with your own data from various data sources with enterprise-grade security

## Add data

Data source  
 Data management  
 Review and finish

### Select or add data source

Your data source is used to ground the generated results with your data. Select an existing data source or create a new data connection with Azure Blob storage, databases, search, URLs, or local files as the source the grounding data will be built from. [Learn more about data privacy and security in Azure AI.](#)

**Select data source \***

Azure AI Search  
Azure AI Search  
Azure Blob Storage (preview)  
Azure Cosmos DB for MongoDB vCore  
URL/web address (preview)  
Upload files (preview)

**Index data field mapping**

Some content and data fields from your index will be mapped using the default mapping in order to ground the model on your data and to display document information. To specify how those fields are mapped, customize your mapping.

Use custom field mapping

I acknowledge that connecting to an Azure AI Search account will incur usage to my account. \* [View Pricing](#)

**Next** **Cancel**

## Add data

Data source  
 Data management  
 Review and finish

### Data management

Set up specific configurations for your data and how the model will respond to requests. [Learn more about data privacy and security in Azure AI.](#)

**Search type** \* Semantic

Add an existing semantic search configuration default

I acknowledge that using semantic search will incur usage to my Azure AI Search account. \* [View Pricing](#)

Enable document-level access control

**Document-level access control**

Permitted groups group\_ids

**Back** **Next** **Cancel**

# Chat with your data, see citations, tailor the chat experience

The screenshot shows the Azure AI Studio interface with the "Chat playground" selected. On the left sidebar, under the "Chat" section, the "Assistant setup" panel is open, showing a "Search Resource" configuration for "Azure AI Search" with the index "productinfo". It includes settings for "Limit responses to your data content" (checked) and "Strictness (1-5)" (set to 3). Below these are sliders for "Retrieved documents (3-20)" (set to 5) and "Input tokens progress indicator" (set to 11/4000). A "Remove data source" button is also present.

In the main workspace, a user query "what products do you have?" is shown at the top. Below it, a card displays a response: "Based on the retrieved documents, we have several hiking products from different brands, including the RainGuard Hiking Jacket<sup>1</sup>, TrekStar Hiking Sandals<sup>2 3</sup>, TrekReady Hiking Boots<sup>4</sup>, and TrailWalker Hiking Shoes<sup>5</sup>.  
... ⌂ ⌂". This response includes five numbered links to product information files: 1 product\_info\_17.md - Part 1, 2 product\_info\_18.md - Part 1, 3 product\_info\_18.md - Part 1, 4 product\_info\_4.md - Part 1, and 5 product\_info\_11.md - Part 1.

At the bottom of the workspace, a message states "New chat session started" and "The assistant setup has been updated. Previous messages won't be used as context for new queries." A text input field at the bottom says "Type user query here. (Shift + Enter for new line)".

On the right side, there are "Import setup" and "Export setup" buttons, and a "Deploy to" dropdown. The "Configuration" panel is open, showing the "Deployment" tab selected with "Deployment" set to "cluGPTTurbo". Other tabs include "Parameters", "Session settings" (with "Past messages included" set to 10), and "Input tokens progress indicator" (11/4000).

# Use Cases & Customer Requests



# Introduction to use cases

Business Problem	Productivity is lagging	Need for process Automation	Degraded Customer Experience	Creating Content is Time Consuming
Business Needs	Increase Productivity	Automate Processes	Improve Customer Experience	Build Creative Content
Solutions	<ul style="list-style-type: none"><li>Conversational Search/Knowledge Insights</li><li>Code Generation and Documentation</li><li>Trend Forecasting</li><li>Report Summarization &amp; Generation</li></ul>	<ul style="list-style-type: none"><li>Document Processing</li><li>Workflow Management</li><li>Fraud Detection</li><li>Supply Chain Optimization</li></ul>	<ul style="list-style-type: none"><li>Intelligent Contact Center</li><li>Agent/Employee Assistance</li><li>Virtual Assistance</li><li>Call Analytics</li><li>Call Summarization</li></ul>	<ul style="list-style-type: none"><li>Marketing/Sales Content Generation</li><li>Personalized Content Generation</li><li>Product Design &amp; Development</li><li>Digital Art</li></ul>

What can Generative AI Do?

Generate New Revenue Streams  
Deliver Differentiated Customer Experiences  
Modernize Internal Processes

# On Your Data – Use Cases

Use Cases	Details
Automated Customer Assistance	Provide quick responses to frequently asked questions and guide users through common troubleshooting steps based on the customers' data.
Real-time Document Search	Provide real-time support to product specifications and guide users through common troubleshooting steps based on product manuals
Citizen Service	Provide quick responses to frequently asked public service questions and guide users through specific steps based on citizen service support
Learning Assistant	Offer explanations and examples to help users understand academic concepts or learn new skills based on specific curricula
Legal Review	Quick access to legal insights from existing and upcoming legislation to properly advise clients
Marketing Insights	Tap into internal and external resources to respond to internal and external marketing inquiries
Software Development	Generate sample code based on the customer's needs
HR Support	Provide quick responses to frequently asked HR questions based on the customers' HR policy
Industry/Competitive Insights	Tap into publicly available resources to gain insights on the industry and competitors
Health Advice	Provide general information on symptoms, first aid, or healthy living.
Predictive Maintenance	Provide predictive maintenance and customer support based on customer's historic data

# Top capabilities and scenarios

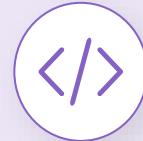
1.0



Content generation



Summarization



Code generation



Semantic search

## Examples of advanced use cases

2.0

### Telecommunications

Media Workflows, Cross Content Linking, Content Creation for Media, Speech Analytics, Analytics for B2C Contact Center, Cognitive Contact Center, Skilling Automation, Realtime Speech Transcriptions & Summarization

### Manufacturing & Industrials

ChatGPT Enabled Technical Support, Customer Sentiment Analysis, Customer Service Knowledge Mining, Digital Proposal Assistant, Customer Journey Analytics, Consumer Insights Advanced Analytics, Records Summarization, Anomaly Detection, Virtual Agents with Copilot

### Automotive, Mobility & Transportation

Marketing Content Generation, Contextual Contact Center, Customer Feedback Loop, Smart Incident Manager, Customer Comms, Text Summarization & Analytics

## Customers Bringing it to Life



# Industry Trends 1/3

Industry	Azure OpenAI Top Patterns	Public References
Automotive, Mobility & Transportation	<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>	    
Financial Services	<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> – Ability to ingest forms and other unstructured data as part of an automated workflow, supporting Claims and other areas of the business using Microsoft Cognitive Services, and Azure OpenAI. Digitize documents, extract key information through Semantic or Cognitive Search and summarize (financial document summarization, RFI/RFPs processing, etc.).</p>	 

# Industry Trends 2/3

Industry	Azure OpenAI Top Patterns	Public References
Manufacturing & Industrials	<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>	
Telecommunications	<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>Cross Content Linking</b> – Ingest content for different sources in various formats to improve knowledge mining and draw better insights.</p> <p><b>Content Creation for Marketing/Media</b> – Generate marketing emails automatically based on personalized customer 360 information.</p> <p><b>Realtime Speech Transcriptions &amp; Summarization</b> – Perform entity extraction and generate summaries of audio transcripts.</p>	

# Industry Trends 3/3

## Healthcare & Life Sciences

### Streamline administrative tasks

Azure OpenAI Service can be used to automate administrative tasks such as scheduling, patient registration, and insurance verification, freeing up healthcare staff to focus on patient care.

### Improve supply chain management

Healthcare providers can use Azure OpenAI Service to help analyze data and help optimize inventory levels of medical supplies, reducing waste and ensuring that essential supplies are always available when needed.

### Predictive maintenance of medical equipment

Azure OpenAI Service can help monitor the performance of medical equipment enabling healthcare providers to predict when maintenance is needed and prevent unexpected downtime.

### Automated medical coding

Azure OpenAI Service can be used to automatically analyze medical records and recommend medical codes for billing and reimbursement purposes, reducing errors and improving efficiency.

### Enable data insights

By analyzing large amounts of data, Azure OpenAI Service can help healthcare providers identify patterns that enables more informed decisions about their practice.

### Fraud detection

Healthcare providers can use Azure OpenAI Service to detect fraudulent insurance claims. Providers can use machine learning algorithms to analyze large volumes of data and identify patterns that indicate potential fraud. By detecting fraudulent claims early, healthcare providers can prevent losses and protect patients from unnecessary treatments.



Epic brings GPT-4 to  
Electronic Health Records

- We are working closely with Epic to integrate & modernize Electronic health records with GPT-4.
- Two-way impact: 1) less time at keyboard entering information and 2) help investigate data in a more conversational way.

## Transaction processing at scale

Information and product discovery



*"We worked with Microsoft technologists to create a bespoke prototype to allow cardiologists and anyone training in the field to **query vast volumes of literature to answer clinical questions or make nuanced comparisons, traversing the significant body of literature.**"*

*Dr Hao Tran, Cardiology Advanced Trainee at Liverpool Hospital*

## Service & support bot



Government of South Australia

Department for Education and  
Child Development

# SA DoE empowering students and teachers with AI in the classroom

## Key Azure products used:



Azure  
Cosmos DB



Azure  
App Service



Azure OpenAI  
Service

Azure Synapse  
Functions

### Challenge

- Need to learn how AI can safely and ethically impact teaching and learning in a positive way, maximising the value and minimising risk

### Outcomes

- More than 1,500 students and 150 educators from eight schools in SA took part in an initial eight-week trial





# Enterprise adoption of AI with 27,000 + business building software with GitHub Copilot

Over 1 in 5 Fortune 500 companies use Copilot  
(<1 yr since launch)



[“ANZ targets 3,000 engineers to use GitHub Copilot”](#)



Westpac sees 46 percent productivity gain from AI coding experiment  
[www.itnews.com.au](http://www.itnews.com.au) • 5 min read

[“Westpac sees 46% productivity gain from AI coding experiment”](#)



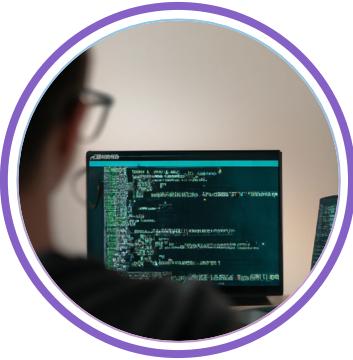
# Accessibility & Inclusion

## Chat or Copilot Experience



Natural language interfaces can assist everyone with their unique needs

## Code Generation



Makes developing code more inclusive and easier for all users

## Voice Input



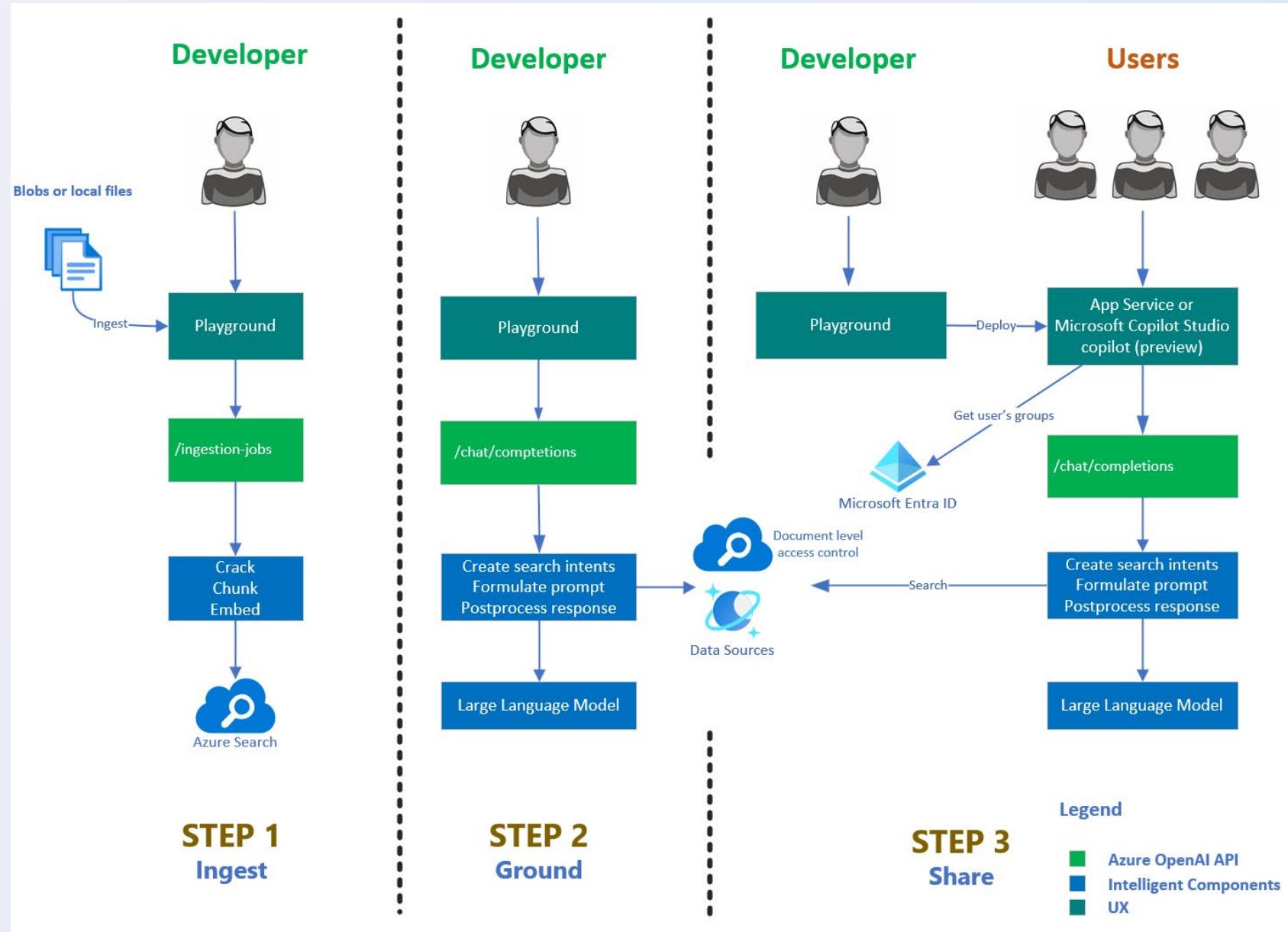
Makes services easier for people with mobility disabilities and those on the go

## Image Generation



Makes content generation easier for all and more accessible to people with vision disabilities

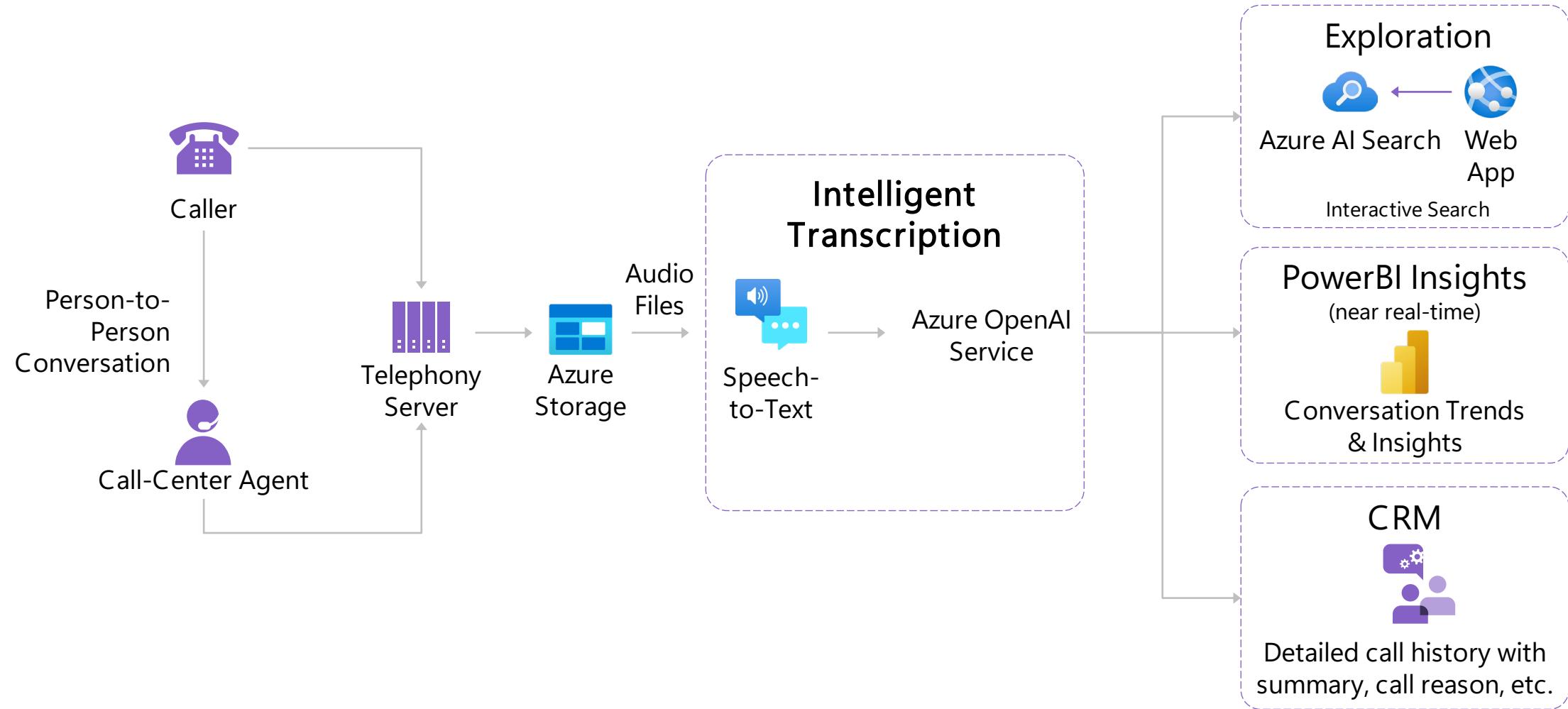
# Azure OpenAI on Your Data Architecture



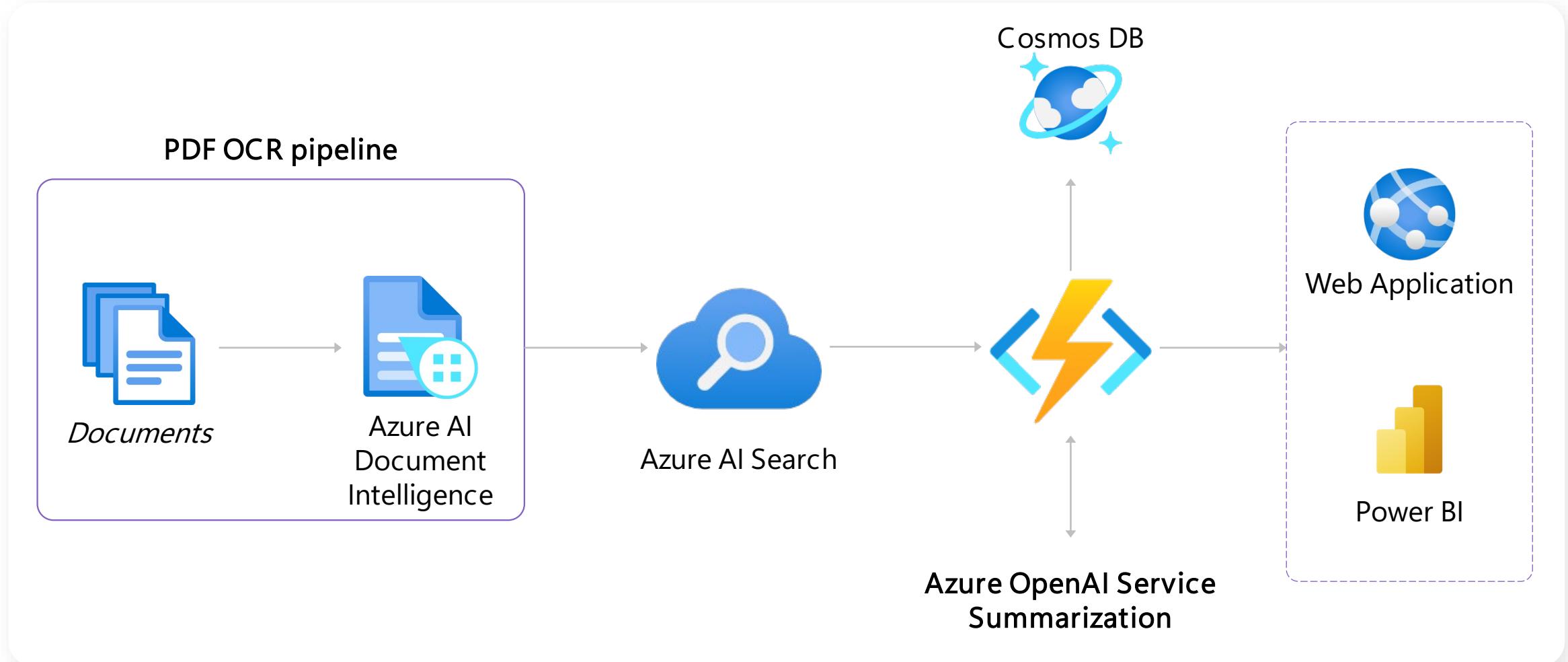


**AOAI+**

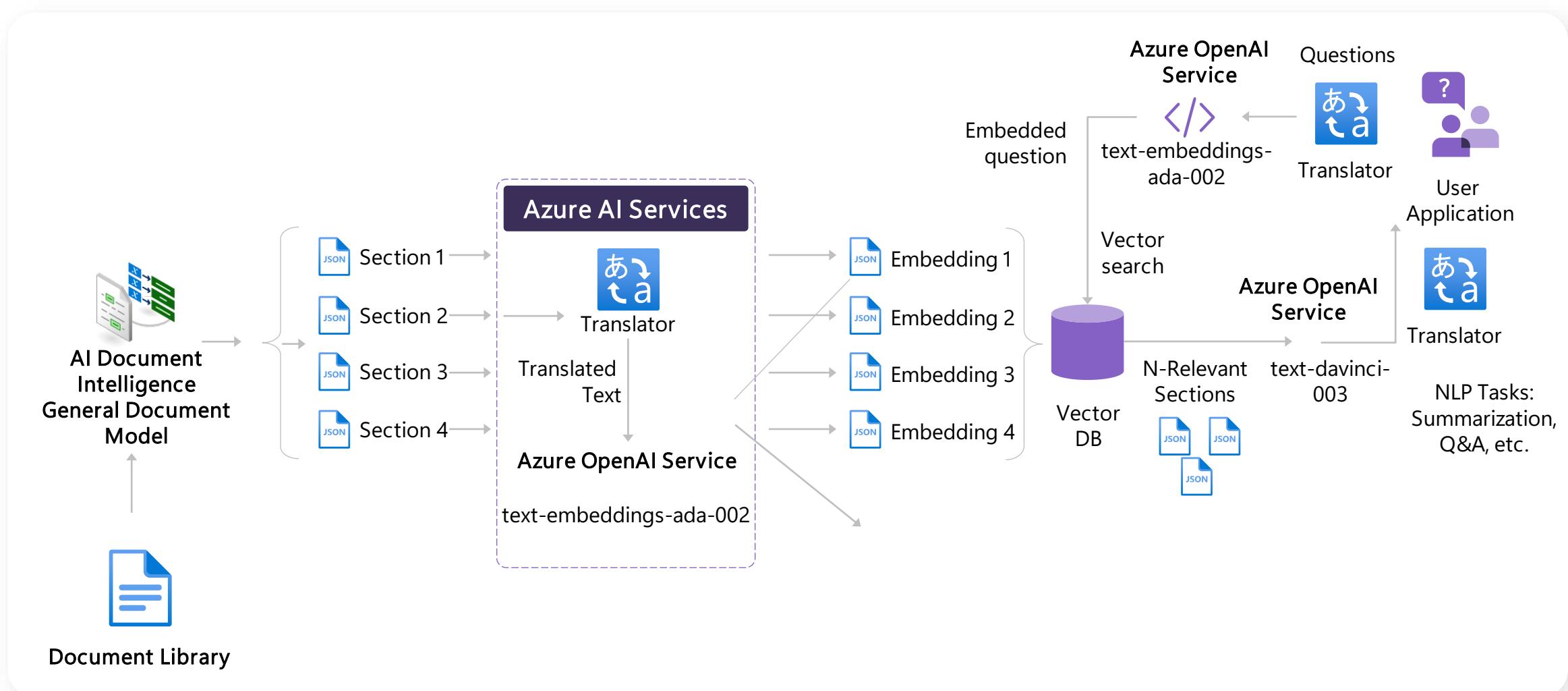
# Contact Center Analytics



# Document processing and summarization



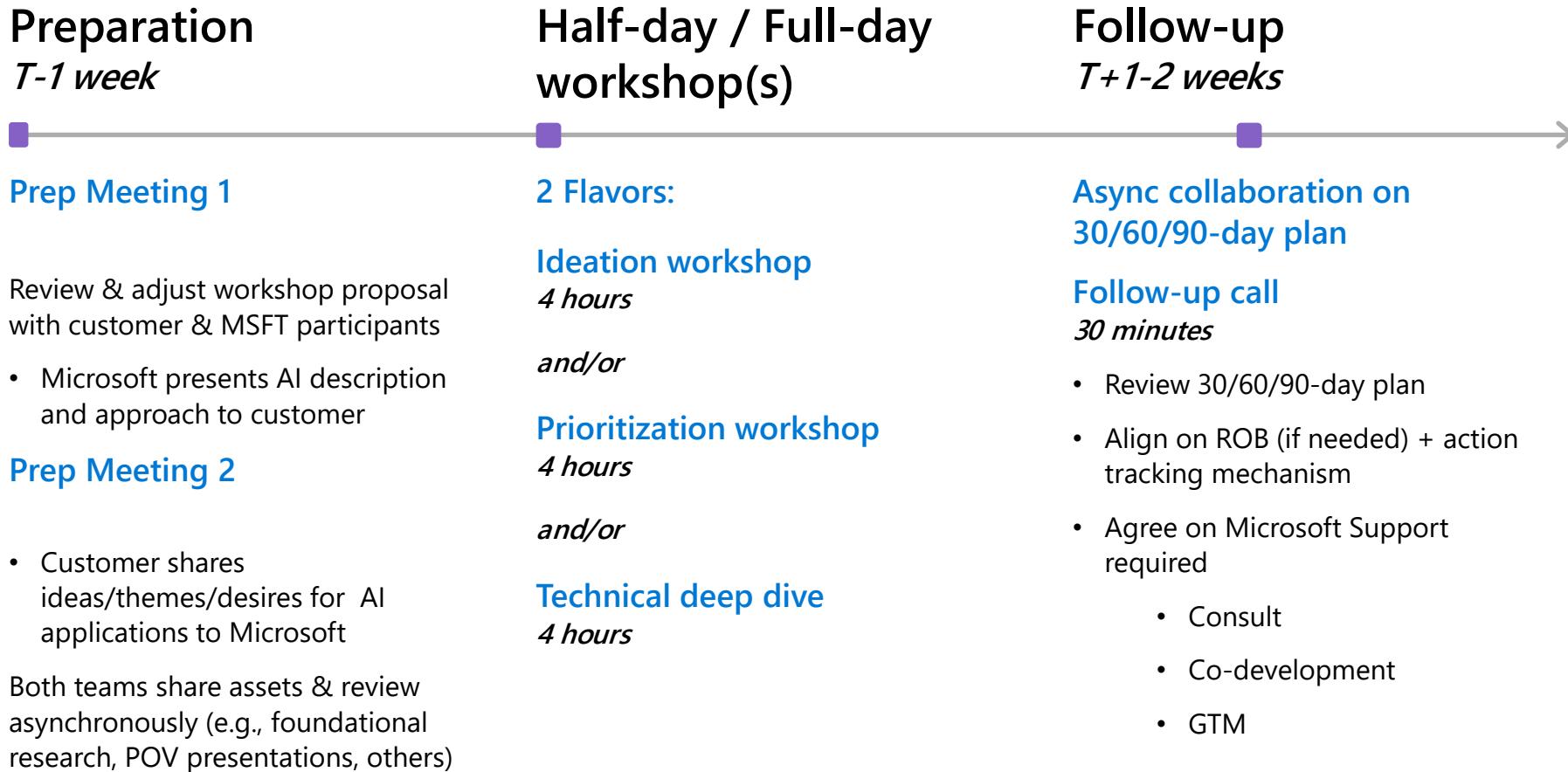
# Document Embedding with Translation



# Accelerating Use Cases

- Identify the use case and quantify how much productivity gain or \$\$ could be saved over a time period through an AI based solution
- Design use case into a solution architecture + pricing – leverage existing AI solution accelerators
- Embark on a PoC/MVP with agreed outcomes & metrics
- Iterate design and align to CAF/WAF frameworks
- Next steps...

# Typical Engagement Outline



# Copilot options



## Extend Copilot

Surface your data and services into Microsoft's Copilots.



**Create plugins**  
to enhance an existing Copilot's functionality.



**Microsoft Graph connectors**  
Bring in your data to Copilot experiences.



## Create copilots

Create copilots anywhere with minimal coding and optional Microsoft data integration.



**Power Platform Connectors**  
Enable customers to create their own copilot experiences with your connectors on Power Platform.



**Microsoft Graph APIs**  
Leverage Microsoft Graph API in your copilot.



**Azure OpenAI Assistants**  
Easily connect your existing APIs with function calling.



**Teams AI Library**  
Use the Teams AI Library to build your own copilot on Microsoft Teams.



## Full control

Build your own end-to-end AI experiences.



**Azure AI Studio**  
Build your own copilot.



**Semantic Kernel**  
Build your own copilot.

# Copilot Examples

	Extend Copilot	Create Copilots	Full Control
Domain	Contract Intelligence	Procurement and supply chain	Manufacturing Operations
Description	Want to meet legal professionals where they are (Word / Outlook) and store documents in the systems they use (Word / Teams) to facilitate contract development and collaboration.	Optimize supply chain based on internal and external events (weather, port data) – leverage available data / connectors.	Alerts and root cause analysis for line operations + suggested remedies for improved performance.
Technologies and/or Tools	Teams message extension (Teams first) to be converted to M365 Copilot (all M365 surface areas)	Copilot Studio (Low Code) Power Platform PP Connectors	AI Studio Azure Machine Learning

# Upcoming Sessions



Cost Modelling and Selling an AI Solution – Thursday 23 May, 11:00am – 12pm  
AEST/1pm-2pm NZT

[Register Here](#)

Lessons Learned Implementing Copilot for Microsoft 365 – Thursday 30 May,  
11:00am – 11:45am AEST/1:00pm – 1:45pm NZT

[Register Here](#)