



Beata Zalewa

Creating Custom AI Copilots: Leveraging
Azure OpenAI for Tailored Solutions



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SUPREMO®

kursySQL.pl

TECHNOLOGY
INNOVATION
DATA
KNOWLEDGE

tidk

About Me:



Lead Technical
Architect



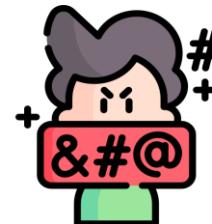
Consultant



Microsoft Certified
Trainer



AI & Cybersecurity
Practitioner



Developer



Freelancer



Azure @ Heart



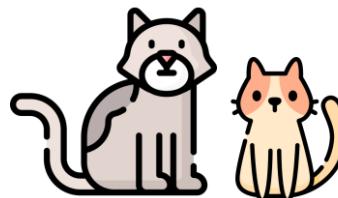
Google Cloud



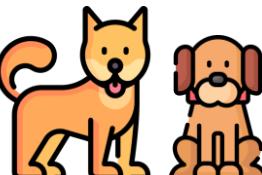
1 Husband



1 Daughter



2 cats



2 dogs



Detective stories



Photography

Agenda

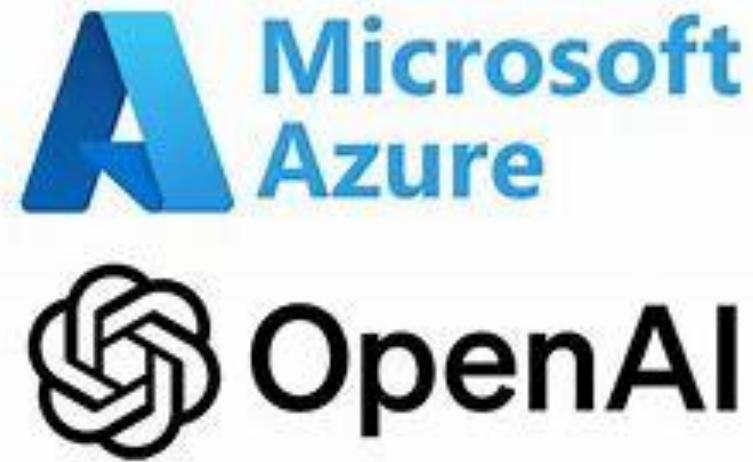
- Introduction to Azure OpenAI
- Introduction to Copilots
- Challenges and Considerations
- Q&A Session





Let's go !

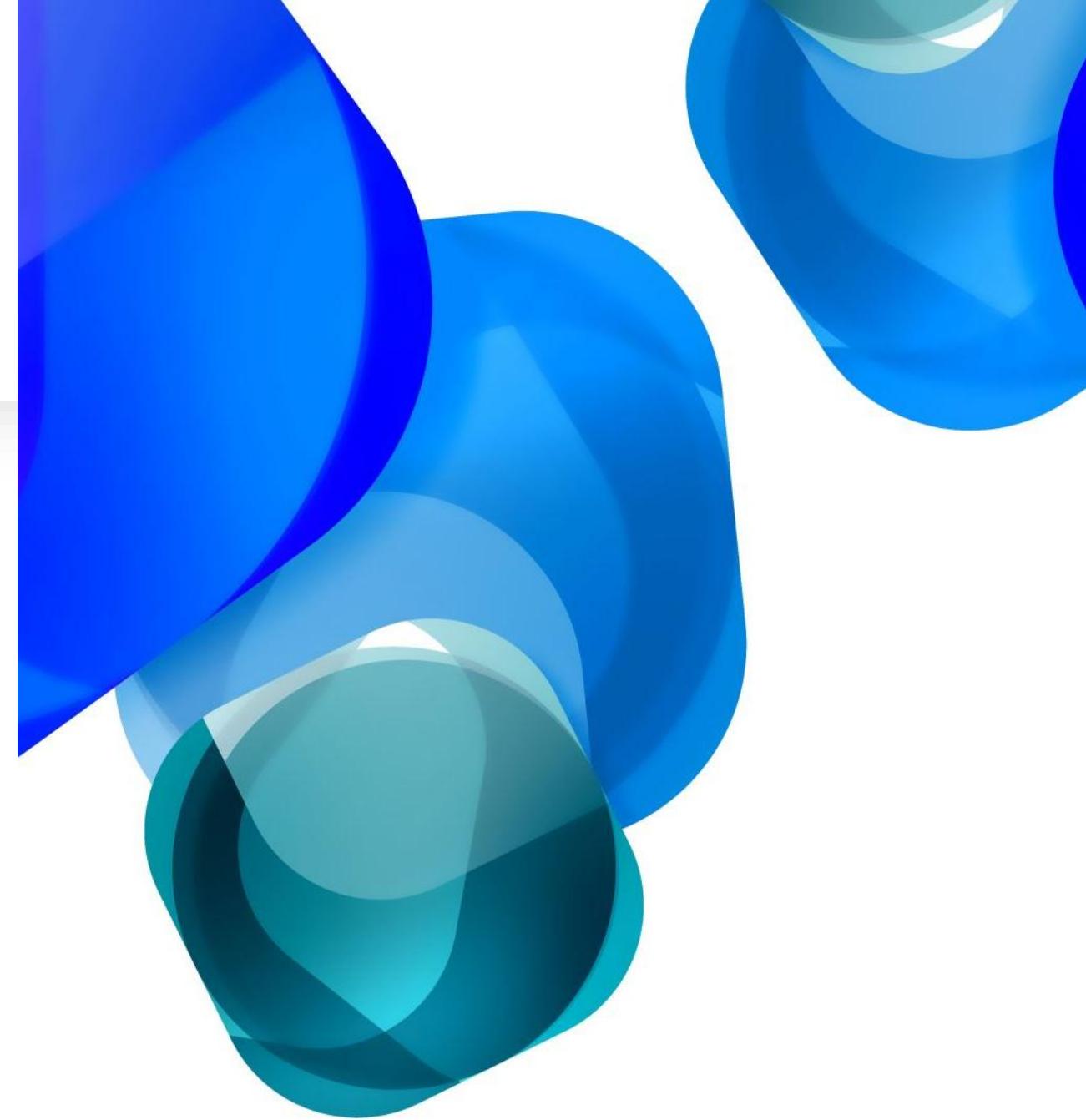
What is Azure OpenAI?



- A cloud-based service providing access to advanced AI models.
- Integrates with Microsoft Azure for scalability and security.
- Supports various AI tasks like language understanding and generation.

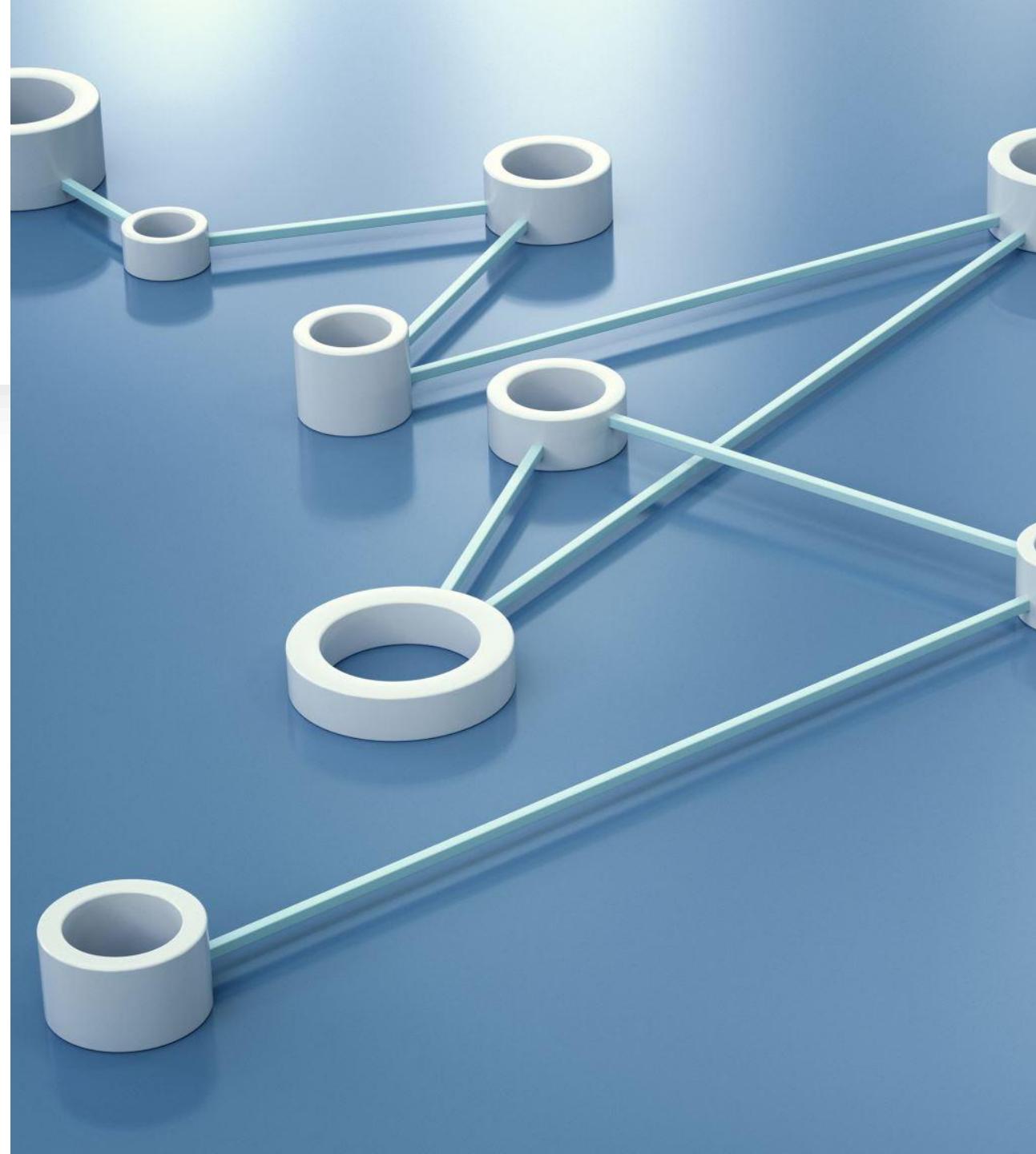
Benefits of Using Azure OpenAI

- Seamless integration with existing Azure services.
- High scalability to handle varying workloads.
- Enhanced security and compliance features.



Key Features of Azure OpenAI

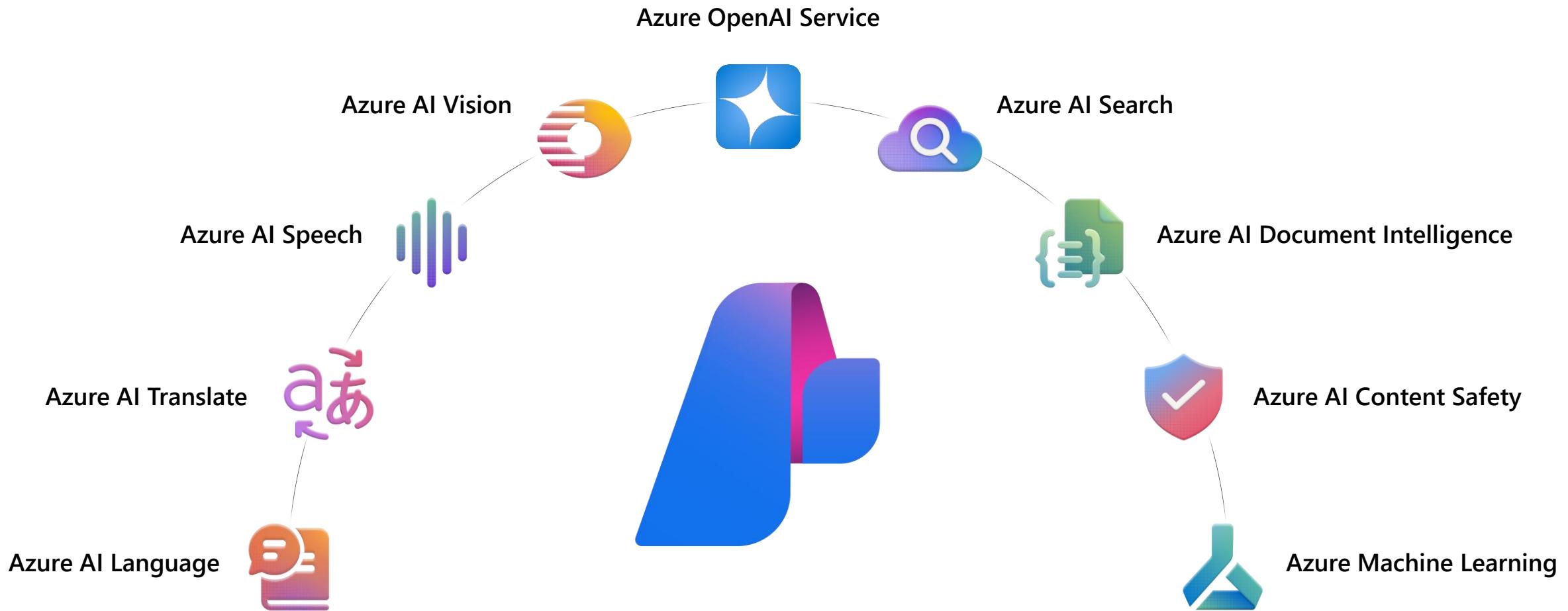
- Access to powerful models like GPT-4 and Codex.
- Fine-tuning capabilities for specific business needs.
- Built-in tools for responsible AI use and content moderation.



Setting Up Your Environment

- Prerequisites for using Azure OpenAI.
- Creating an Azure account and subscription.
- Setting up the Azure OpenAI resource.





Microsoft Azure AI

Azure AI

AI foundation models



Azure AI Services

Pre-trained solutions for intelligent applications



Azure Machine Learning

Full-lifecycle tools for designing and managing AI models



Responsible AI Tooling

Build and manage apps that are trustworthy by design



Azure AI Studio

A comprehensive platform to develop and deploy custom copilots

Generally available



Azure AI Studio

A comprehensive platform to develop and deploy custom copilots

API and model
choice

Complete AI
toolchain

Responsible AI
tools and practices

Enterprise-grade
production at scale

Azure AI Studio

Azure AI Studio

All resources & projects 6 🔍 ⚙️ 😊 🚶

Home

Recent projects

View all projects + New project

| Project | Hub | Description | Location | Created on |
|----------------------------|---------------------------|-------------|----------|---------------------|
| info-demo-expertsummit2024 | info-expertsummit-ai-demo | | eastus | Nov 7, 2024 8:55 AM |
| info-demo-expertsummit2024 | info-expertsummit-ai-demo | | eastus | Nov 7, 2024 8:55 AM |

Get started

- Model catalog
- Model benchmarks
- Prompt catalog
- Azure OpenAI
- AI Services

Management

- All resources
- Quota

Jump to top tasks and tools

Get started with Azure AI Studio
Learn how you can start developing generative AI applications with next-gen models and tools, via web app or directly in code with the SDK.

[Get started in Azure AI Studio](#)

Assistants API available on Azure OpenAI service
Develop power agent-like experiences with built-in state and thread management, knowledge retrieval, and tools including code interpreter and function calling.

[Build your AI Assistant](#)

Experiment with prompts in the playground
See how different foundation models respond to user input by trying out different prompts, adjusting parameters, and even grounding on your own data.

[Try some prompts in the playground](#)

Deploy large language models (LLMs)
Deploy an LLM or prompt flow and make its API available for use to an application, website, or other production environment.

[View deployments](#)

Azure AI Studio

Azure AI Studio / All resources / info-expertsummit-ai-demo / All projects / info-demo-expertsummit2024 / Overview

All resources & projects 6 Project info-demo-expertsummit2024 ?

To all projects +

Current project info-expertsum...

Project overview Project properties

Pick up where you left off

Once you've deployed a model, connected data, or created any assets, they'll show up here ... so you can always pick up where you left off.

Documentation View more

Build and deploy a question and answer copilot with prompt flow in Azure AI Studio View more

Use generative AI and prompt flow to build, configure, and deploy a copilot for your retail company called Contoso.

Build a custom chat app in Python using the prompt flow SDK View more

Develop a custom chat app in your local development environment, and learn to run and evaluate LLM prompts with the Prompt Flow SDK.

Retrieval augmented generation and indexes View more

This article talks about the importance and need for Retrieval Augmented Generation (RAG) and Index in generative AI.

Description edit
Describe your project (optional)

Project properties

Hub display name info-expertsummit-ai-demo View more

Hub resource name info-expertsummit-ai-demo View more

Subscription ZALNET-PAYG View more

Resource Group ExpertSummitAzureAIDemoRG View more

Manage in Azure Portal View more

Get API endpoints and keys View more

View subscription quota View more

Delete project

Project users 2 View all

Beata Zalewa (You) info@zalnet.pl Owner

Project overview Project properties

Project properties Project overview

Azure AI Studio

The screenshot shows the Azure AI Studio interface for managing a deployment named "gpt-35-turbo". The left sidebar contains navigation links for projects, playground, and tools. The main content area displays deployment details, endpoint configuration, monitoring settings, and useful links.

Deployment info:

| Name | Provisioning state |
|--------------|--------------------|
| gpt-35-turbo | Succeeded |

Endpoint:

| Target URI |
|---|
| https://ai-infoexpertsummitaidemo659424480964.openai.azure.com/openai/deployments/gpt-35-turbo |

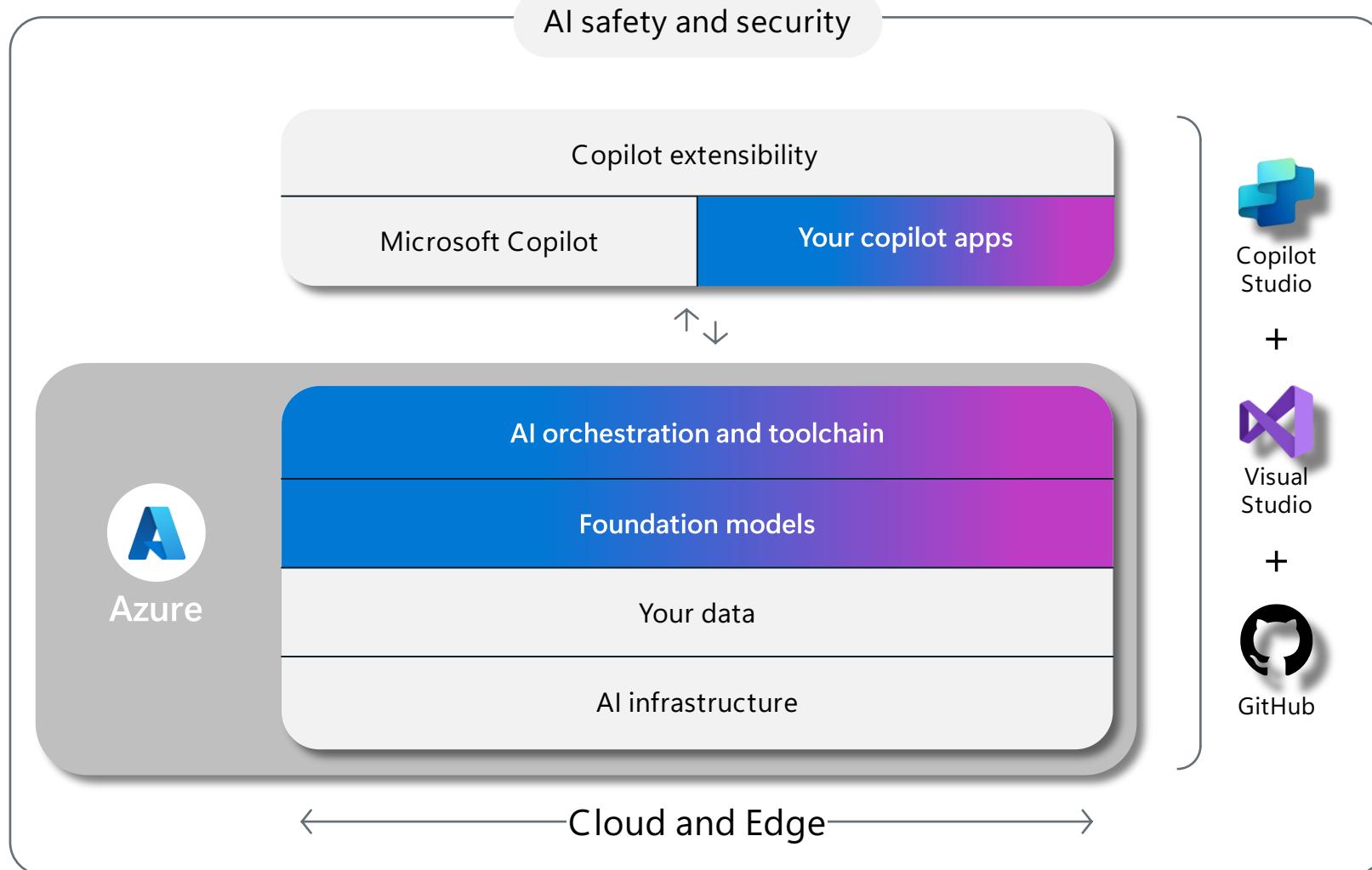
Monitoring & safety:

| Content filter |
|----------------|
| DefaultV2 |

Useful links for application development:

- [Code sample repository](#)
- [Tutorial](#)

Copilot stack



Copilot Studio

The screenshot shows the Azure AI Studio interface for the project "info-demo-expertsummit2024". The main page displays the deployment "gpt-35-turbo" with various configuration details and monitoring links.

Deployment Info:

- Name: gpt-35-turbo
- Provisioning state: Succeeded
- Deployment type: Standard
- Created on: 2024-11-07T08:02:26.3608594Z
- Created by: 7d923f60-74b7-4b4a-8f49-3e8f1b0eaeeaa
- Modified on: Nov 7, 2024 9:02 AM
- Modified by: 7d923f60-74b7-4b4a-8f49-3e8f1b0eaeeaa
- Version update policy: Once a new default version is available
- Rate limit (Tokens per minute): 120,000
- Rate limit (Requests per minute): 720
- Model name: gpt-35-turbo
- Model version: 0301
- Life cycle status: GenerallyAvailable
- Date created: Mar 9, 2023 1:00 AM
- Date updated: Jul 6, 2023 2:00 AM
- Model retirement date: Jan 27, 2025 1:00 AM

Endpoint:

- Target URI: <https://ai-infoexpertsummitaidemo659424480964.openai.azure.com/openai/deployments/gpt-35-turbo>
- Authentication type: Key
- Key: [REDACTED]

Monitoring & safety:

- Content filter: DefaultV2

Useful links for application development:

- [Code sample repository](#)
- [Tutorial](#)

copilotstudio.microsoft.com

Copilot Studio

The screenshot shows the Microsoft Copilot Studio interface. At the top, there's a banner with a mountain landscape. The navigation bar includes icons for Home, Create, Agents, Library, and more. The main header says "Copilot Studio". On the right, it shows "Environment ZALNET Beata Zalewa ..." with a gear icon, a question mark icon, and a "BZ" button.

The central area features a large call-to-action button with the text "Describe your agent to create it" and three categories: Helpdesk, Expense tracking, and HR and benefits. Below this is a text input field with placeholder text "Use everyday words to describe what your agent should do" and a "Next" button.

A note below the input field states: "This AI-powered feature above is currently in preview. See terms and supplemental terms".

Under the heading "Start with a template", there are two rows of cards:

- Safe Travels**: Provides answers to common travel questions and related health and safety guidelines.
- Website Q&A**: Instantly answer user questions using the content of your web site or other knowledge.
- Team Navigator**: Assists employees in finding colleagues and their hierarchy within the organization using Microsoft Teams.
- IT Helpdesk**: Empowers employees to resolve issues and effortlessly create/view support tickets.

- Store Operations**: Improve the efficiency of retail frontline workers by enabling easy access to store procedures and policies.
- Case Management**: Provide round-the-clock automated support to customers by understanding their issues and creating cases.

At the bottom, there's a section titled "Learning resources" with several links:

- Quick start: Create and deploy an agent
- Documentation
- Security and Governance
- Responsible AI FAQs
- Quick start: Use Generative AI in an agent
- Support community
- Coming soon: See release plans
- What's new: See release notes

Copilot Studio

Copilot Studio

Environment
ZALNET Beata Zalewa ...

Agents

+ New agent Import agent Search agents

| Name | Type | Last modified ↓ | Last published | Owner |
|--------------------------------|-------------------|---|----------------|--------------|
| Store Operations | Agent | # Microsoft Copilot Studio 4 hours ago | Never | Beata Zalewa |
| Safe Travels Copilot 1 | Agent | # Microsoft Copilot Studio 4 hours ago | Never | Beata Zalewa |
| Weather Copilot 1 | Agent | # Microsoft Copilot Studio 4 hours ago | Never | Beata Zalewa |
| Contoso Customer Service Demo | Agent | # Microsoft Copilot Studio 5 hours ago | Never | Beata Zalewa |
| Website Q&A Copilot | Agent | # Microsoft Copilot Studio 1 month ago | Never | Beata Zalewa |
| Copilot demo | Agent | # Microsoft Copilot Studio 5 months ... | 5 months ago | Beata Zalewa |
| ServiceNow Ticket Status | Agent | Beata Zalewa 6 months ago | Never | Beata Zalewa |
| PVA 1 OpenAI Chatbot (classic) | Chatbot (classic) | Beata Zalewa 1 year ago | Never | Beata Zalewa |

Copilot Studio

Copilot Studio  Environment ZALNET Beata Zalewa (...)  ? 

Home  Create  Agents  Library  ...

Weather Copilot 1  Overview Knowledge Topics Actions Analytics Channels   ... 

Your agent is ready! Here's what's next:

-  Add actions so your agent can do things for you
-  Build topics to focus and guide how your agent answers
-  Publish your agent so others can use it



Details 

 Name
Weather Copilot 1

Description
Your go-to assistant for getting weather forecast

Instructions
You should remain friendly and polite at all times. Do not answer questions that are not related to the weather.

Knowledge 

Add data, files, and other resources to inform and improve AI-generated responses.

Allow the AI to use its own general knowledge. [Learn more](#) 

Actions 

Add actions to empower the AI to complete specific tasks for improved engagement.

 MSN Weather - Get current weather 

 MSN Weather - Get forecast for today 

Test your agent   

Hello, I'm Weather Copilot 1, a virtual assistant. I can answer general questions about the current weather as well as forecasts for today and tomorrow. Just so you are aware, I sometimes use AI to answer your questions.

Note: You can now customize this copilot's topics and knowledge for your own needs. For more information about this template and how to modify it, visit the template [documentation](#). 

Use the option that **fits** your scenario **the best**



Azure AI Studio

Offers a wide range of **AI services and models** to build the entire AI development lifecycle

Fast and frictionless **prototyping for quick results**

Azure AI Studio offers **state of the art evaluation, safety** and testing tools for your LLM application



Copilot Studio

1400+ connectors available out-of-the-box + you can create your own connector

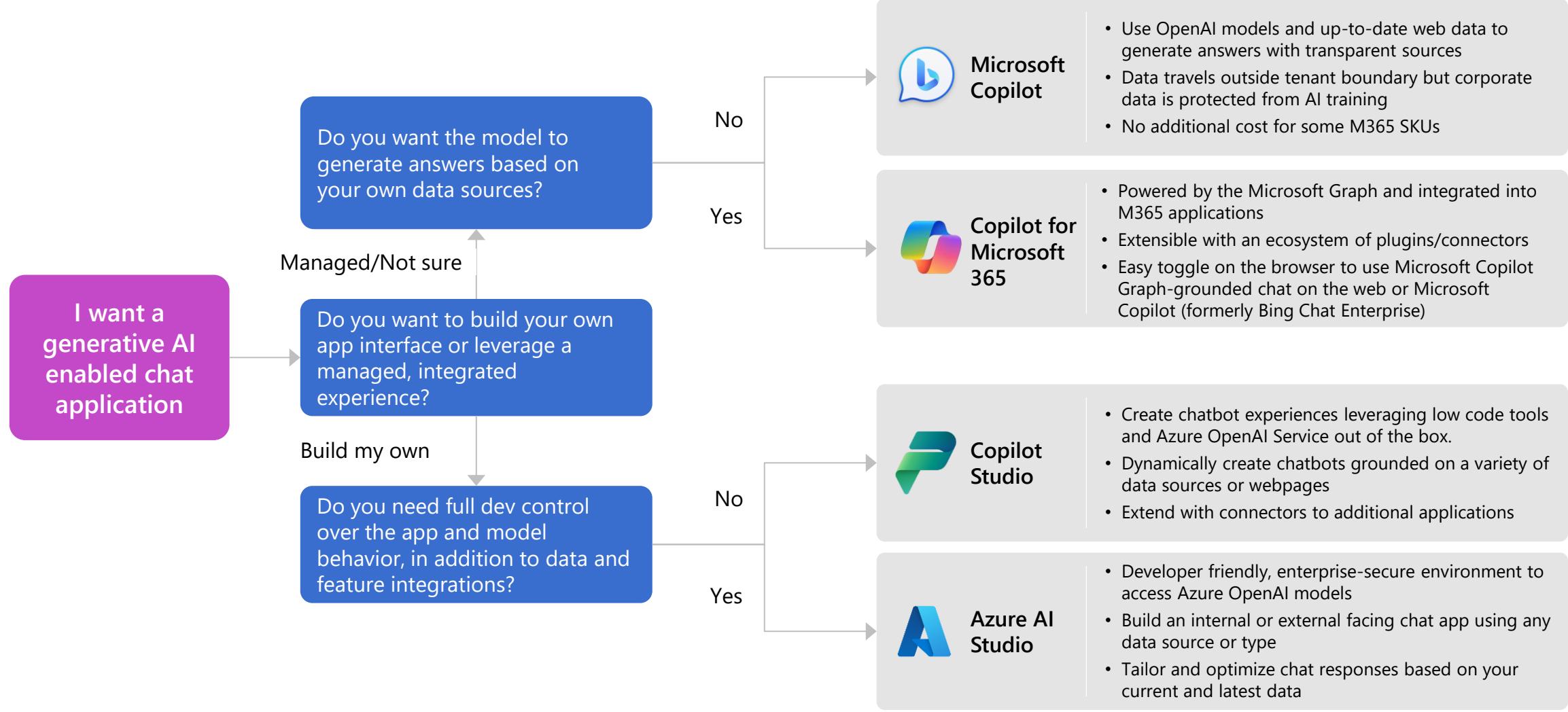
Channels like **Microsoft Teams, Facebook, and Slack** are easy to configure

Enterprise dialog management and conversational orchestration

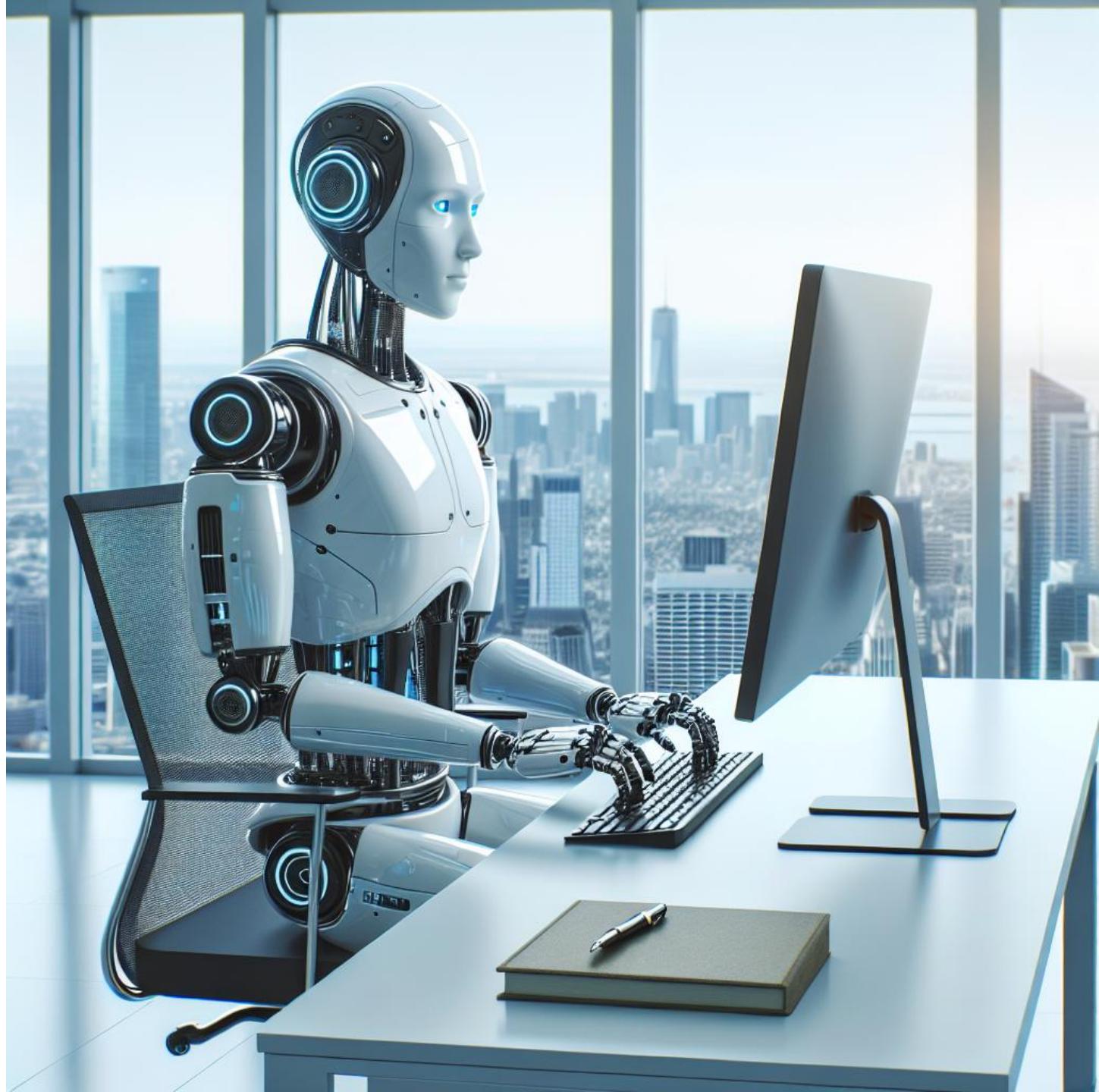
Training Resources Available

- Explore Microsoft Learn for comprehensive training modules on Azure OpenAI Service.
- Participate in community challenges or hackathons focused on AI development.
- Utilize online courses that cover best practices in implementing AI solutions.

Microsoft AI Decision Guide (Buy or Build)

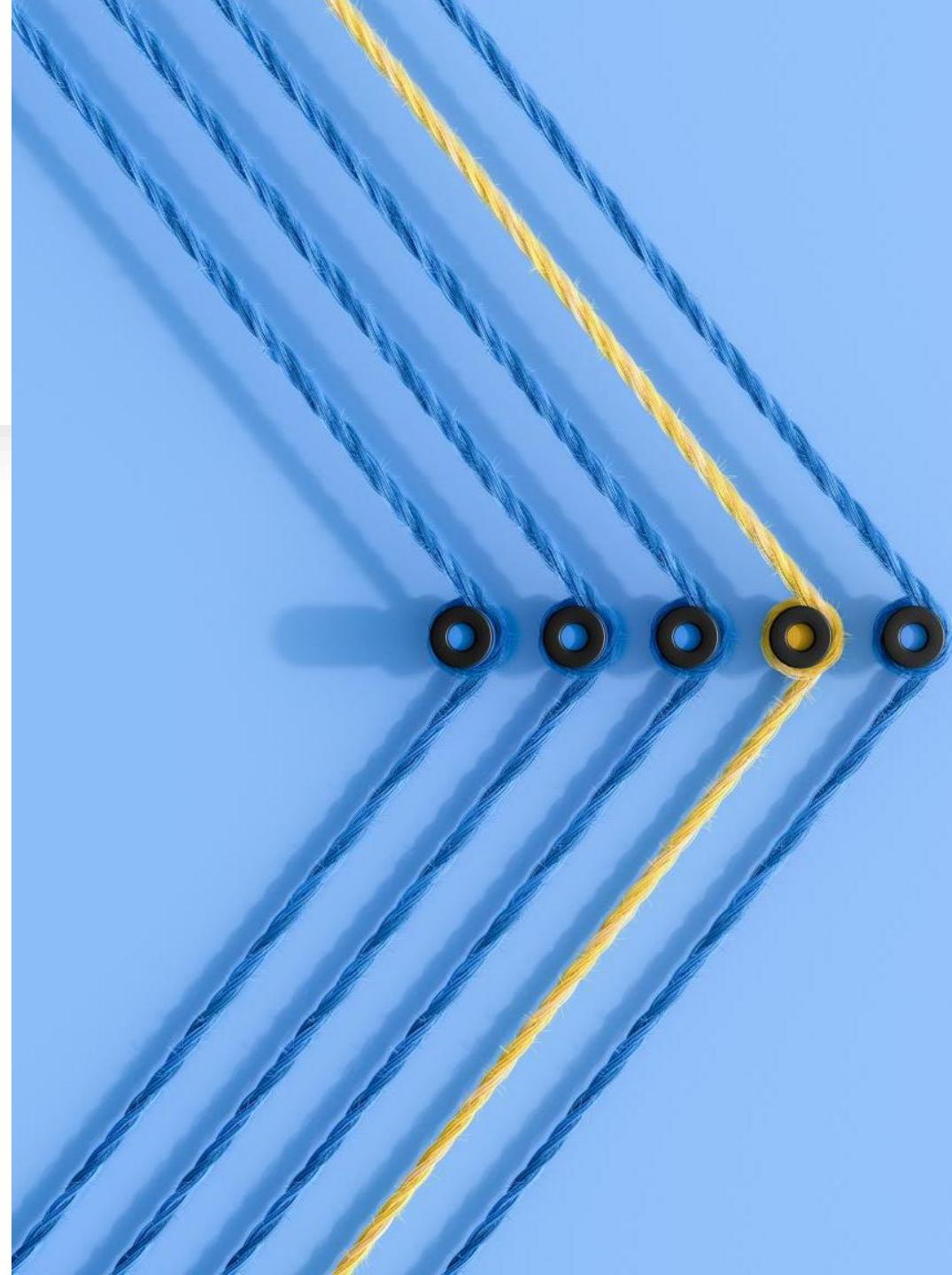


Demo



Building Your First AI Copilot

- Step-by-step guide to creating a basic project.
- Using the Azure OpenAI Studio for model selection.
- Deploying your first model with sample data.



Integrating with Existing Systems

- Connect Azure OpenAI with other Azure services.
- Examples of integrations (e.g., Azure Functions, Logic Apps).
- Ensuring smooth data flow between systems.



Security Considerations

- Overview of security features in Azure OpenAI.
- Best practices for securing your AI applications.
- Compliance with data protection regulations.



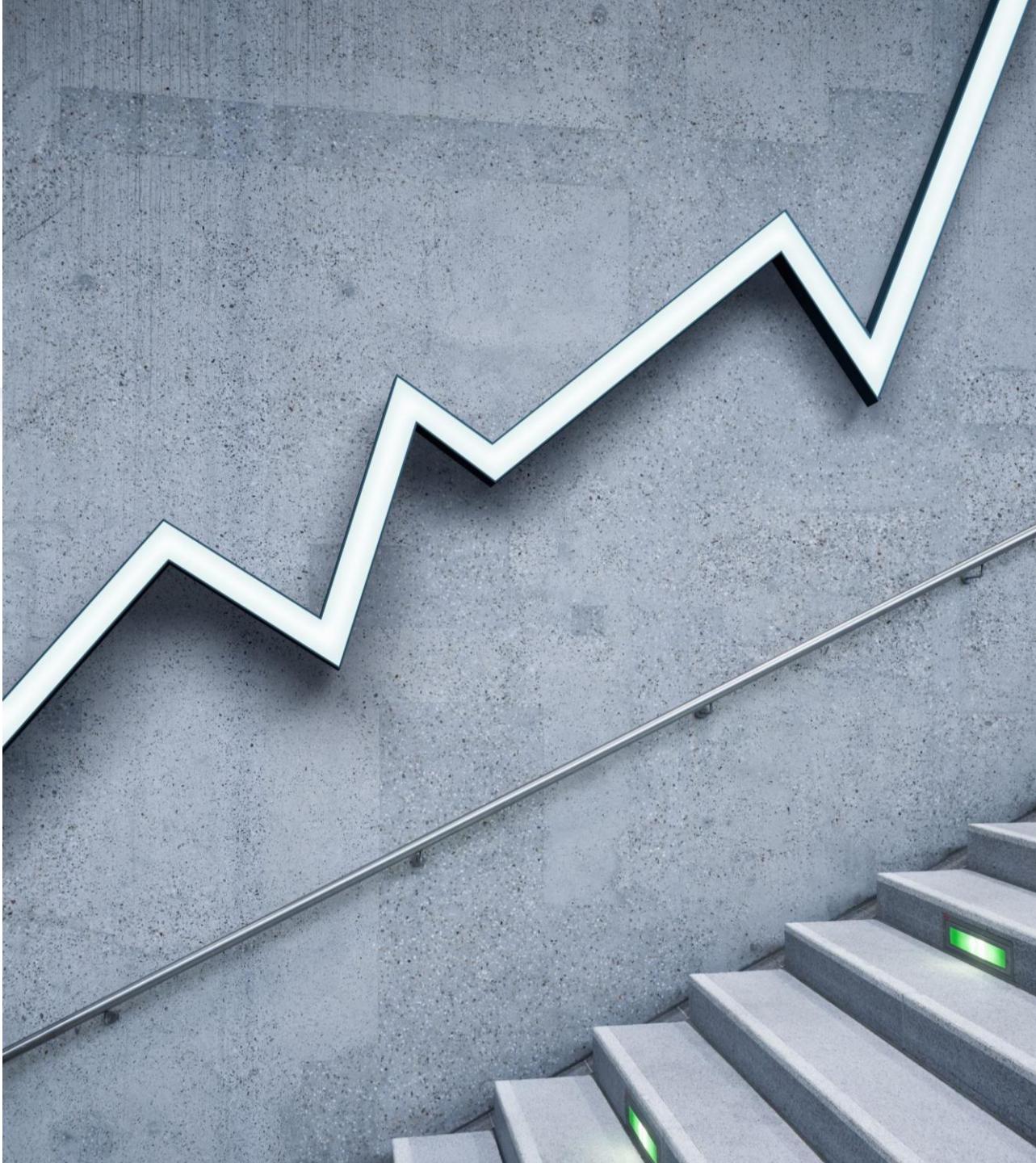


Building a Team for Success

- Skills required for developing custom AI solutions.
- Importance of cross-functional collaboration in projects.
- Encouraging a culture of innovation within teams.

Measuring Success

- Key performance indicators (KPIs) to track effectiveness.
- Gathering user feedback to assess impact and satisfaction.
- Iterative improvement based on performance metrics.



Ethical Considerations in AI Development

- Azure OpenAI emphasizes ethical AI use with built-in content filtering and monitoring features.
- Ensures compliance with privacy regulations and responsible data handling practices.
- Supports diversity and inclusion initiatives in AI development..



Cost-Effectiveness

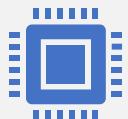
- Pay-as-you-go pricing model allows businesses to pay only for what they use.
- Flexible plans available for startups, enterprises, and non-profits.
- Cost savings from reduced infrastructure management and resource allocation.



Pre-Trained Models



Access to various pre-trained models for tasks like text summarization and sentiment analysis.



Fine-tune models with minimal coding to meet specific business needs.



Reduces time and resources needed for model training from scratch.

Custom Model Creation



Use OpenAI Codex to create custom models tailored to specific applications.



Capable of generating code, text, images, and more from natural language inputs.



Facilitates rapid development of applications across various domains.

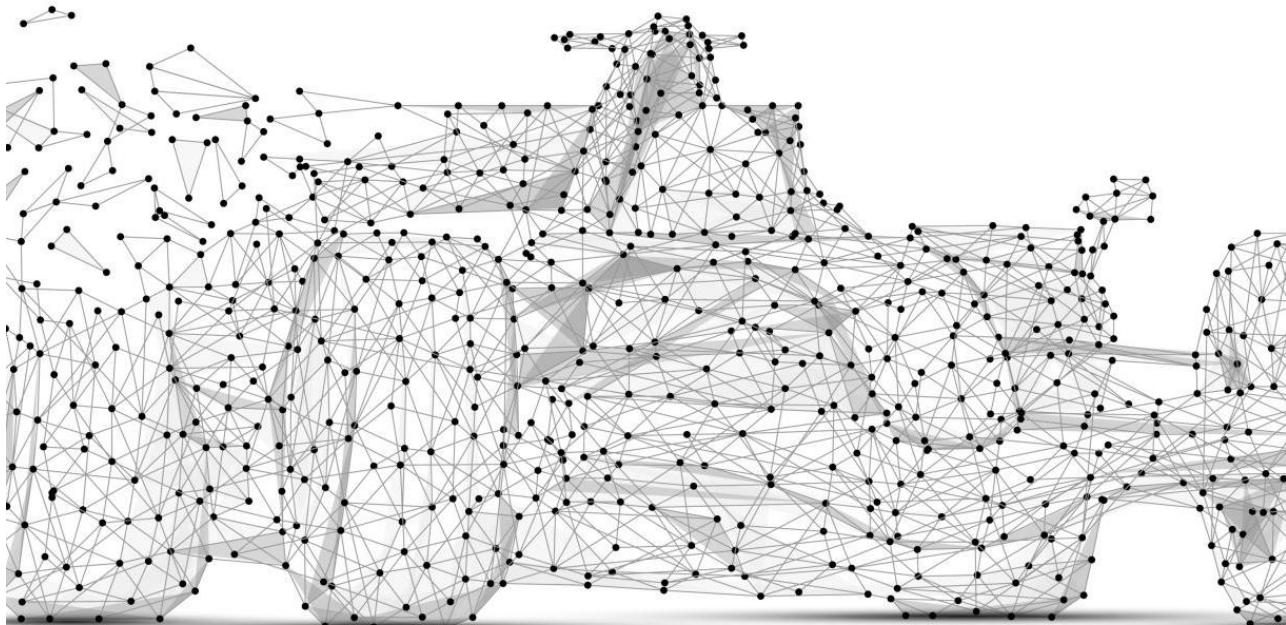
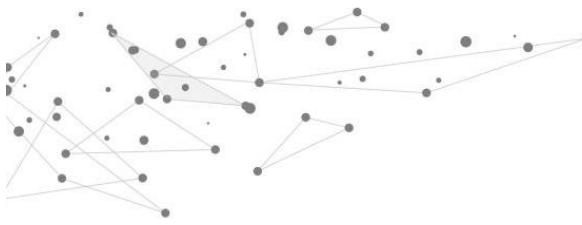


Enhanced Collaboration

- Integration with tools like Azure Machine Learning and Visual Studio Code.
- Web-based OpenAI Playground allows teams to experiment and share results easily.
- Promotes collaboration among developers, data scientists, and business stakeholders.

Use Cases in Business

- Automate customer service with intelligent chatbots powered by Azure OpenAI.
- Generate content for marketing, product descriptions, and internal documentation.
- Analyze large datasets to gain insights and drive decision-making processes.



Improved Customer Experience

- Use AI to enhance user interactions through personalized recommendations and support.
- Streamline processes like resume screening or document summarization for HR departments.
- Create engaging conversational agents that improve customer satisfaction.



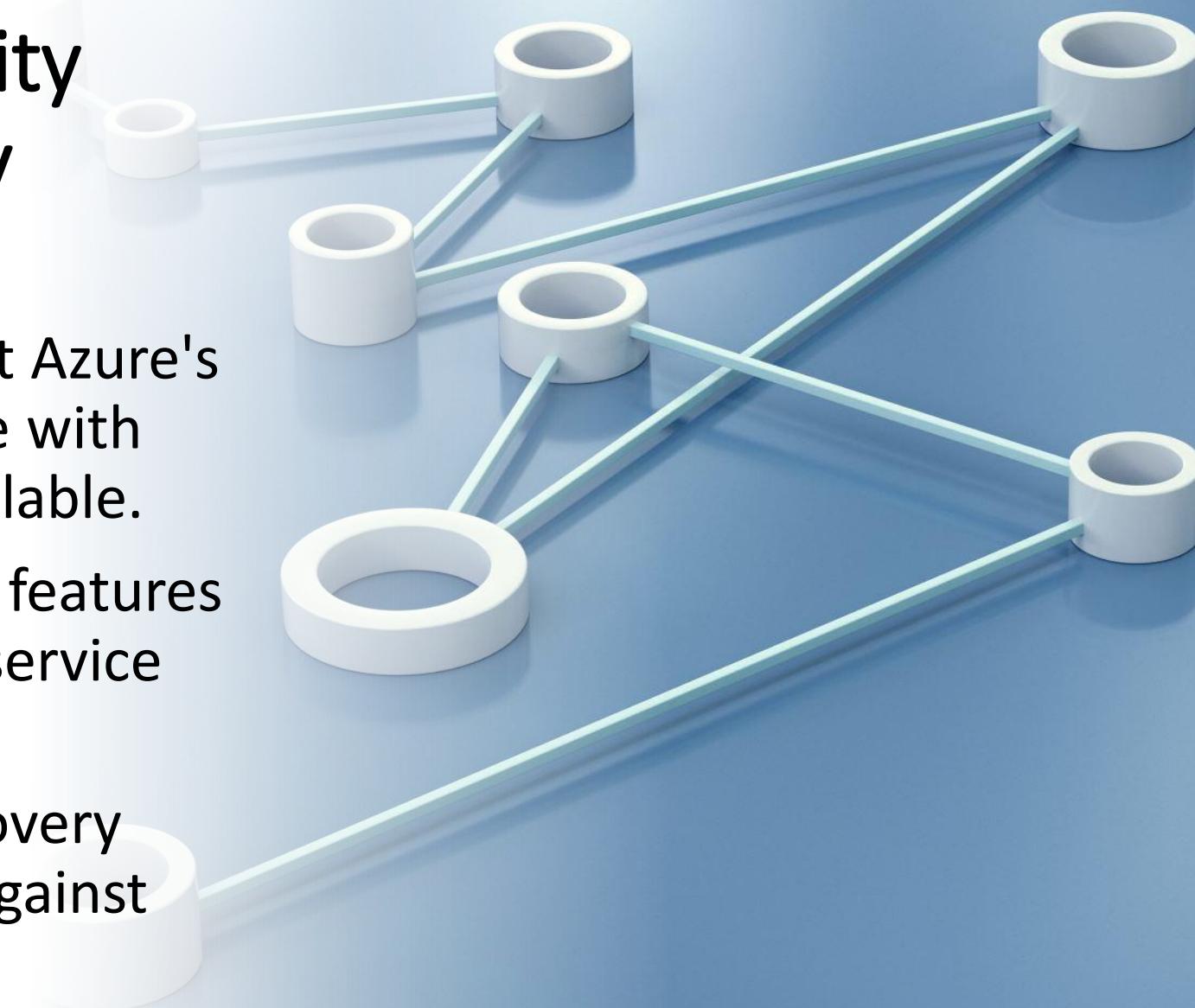


Integration with Microsoft Ecosystem

- Leverage existing Microsoft tools such as Power BI, Dynamics 365, and Teams.
 - Enhance productivity by integrating AI capabilities into familiar workflows.
 - Benefit from a unified platform that supports various business functions.

High Availability and Reliability

- Hosted on Microsoft Azure's global infrastructure with over 60 regions available.
- Built-in redundancy features ensure continuous service availability.
- Robust disaster recovery options safeguard against data loss.



Training AI Models Efficiently

- Azure provides the necessary computing power for training complex AI models.
- Access to vast datasets enhances the quality of trained models.
- Accelerates the development cycle from ideation to deployment.



Community Support and Resources

- Extensive documentation, tutorials, and code samples available for developers.
- Active community forums provide a platform for sharing experiences and solutions.
- Continuous updates ensure users stay informed about new features and best practices.



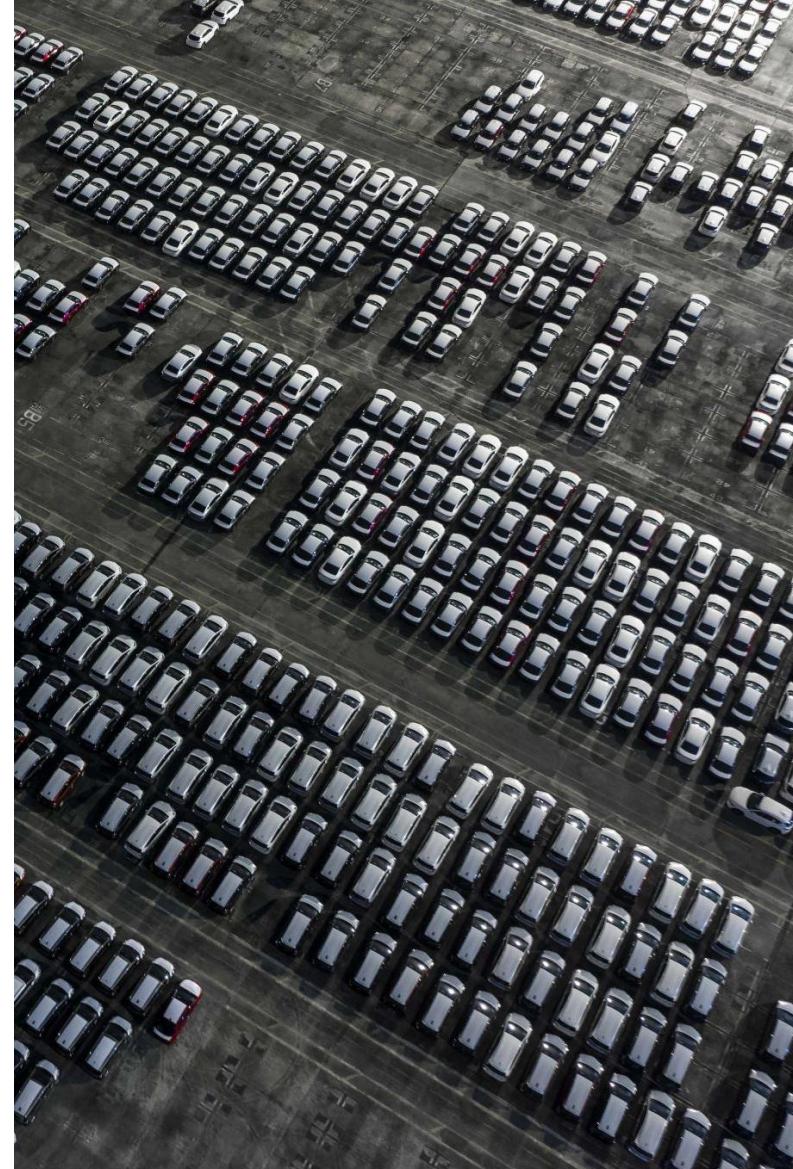
Challenges of Implementation

- Initial learning curve for teams unfamiliar with AI technologies.
- Ensuring data privacy while utilizing third-party AI services can be complex.
- Ongoing maintenance and updates required to keep models effective.



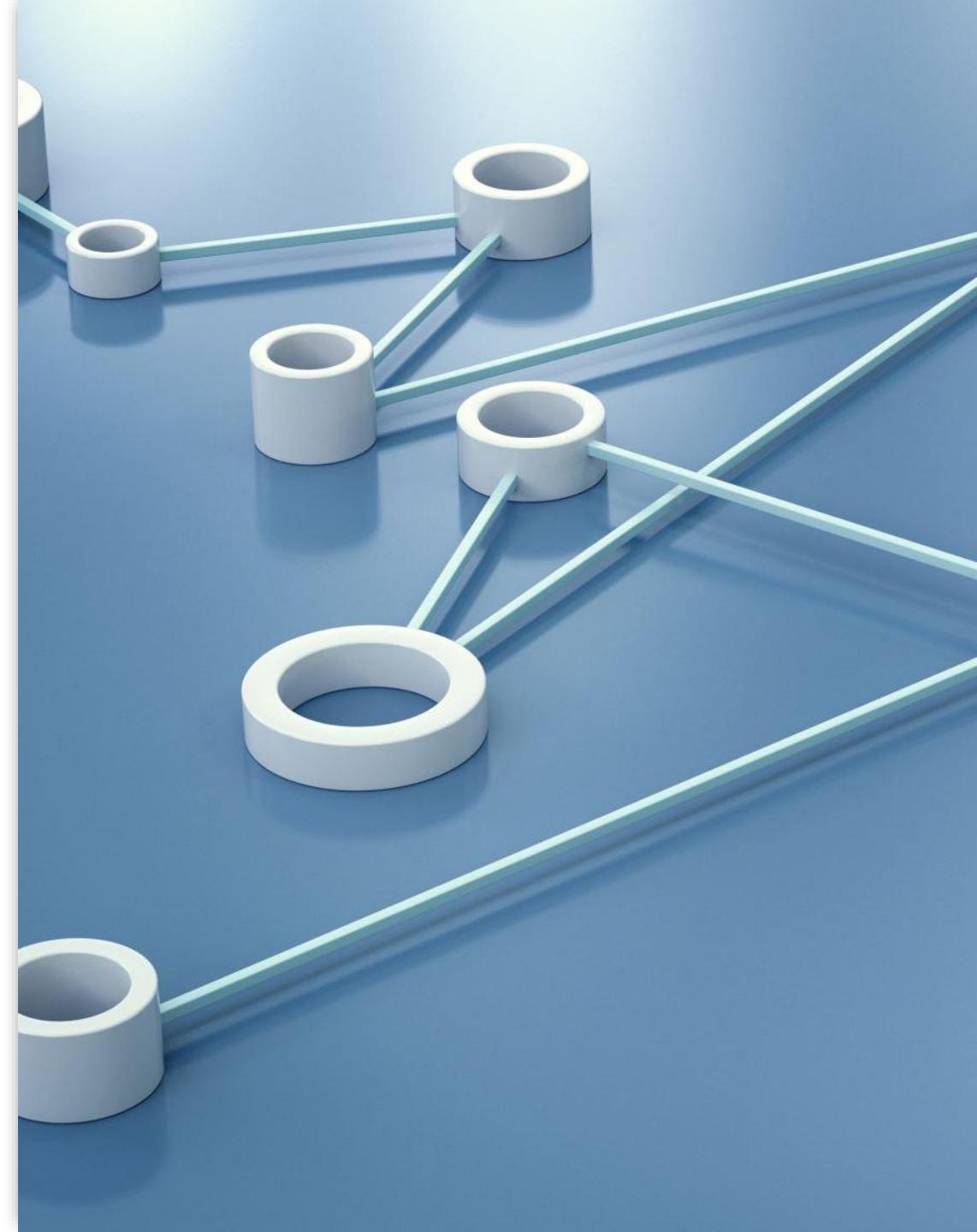
Real-Life Success Stories

- Companies like CarMax use Azure OpenAI to streamline content creation processes significantly.
- TomTom leverages AI for immersive in-car infotainment systems, enhancing user experience.
- Fraport integrates chatbots to assist employees in operational tasks efficiently.



Conclusion

- Azure OpenAI offers a powerful platform for businesses looking to harness the potential of AI technology.
- Combining scalability, security, and integration capabilities makes it an attractive option for enterprises of all sizes.
- Embrace the future of AI by leveraging Azure OpenAI solutions tailored to your business needs.



I am actively seeking new opportunities and exciting challenges. If you would like to get in touch, please feel free to reach out through the following channels:

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LinkedIn: <https://www.linkedin.com/in/beatazalewa/>

Blog: <https://beatazalewa.com/>

X: <https://x.com/beatazalewa>

GitHub: <https://github.com/beatazalewa>



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