

# Mastering Azure OpenAI

Flavio Meyer







# Agenda

- About me
- Introduction to Azure OpenAI
- News from Microsoft Ignite 2024
- Key Features & Capabilities
- Use Cases
- Demo: Building Infrastructure in Azure
- Q&A Session

# About Me

## Flavio Meyer

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### About me | University

Higher Technical School Switzerland, MLSA since April 2024

### About me | Tech

Azure Architect, Administrator, DevOps and AI Engineer



### About me | Private

Switzerland, Racket sport, Travelling



# What is Azure OpenAI?

- Definition
  - Integration of OpenAI's advanced AI Models with the Azure ecosystem
  - Enables businesses to deploy and manage AI models
- Key Benefits
  - Scalability
  - Security compliance
  - Integration with other Azure services
  - Same token price as OpenAI
  - Available in 23 Azure regions

# News from Microsoft Ignite 2024

- Azure AI Foundry
  - Unified AI platform
  - SDK, Tracing and Content safety for Images
- Azure AI Agent Service
  - Public preview next month
  - Support for agents and multi-agents
  - Easier integration with Fabric, Teams, SharePoint, etc.
- Azure AI Content Understanding
- Fine-tuning
  - Vision
  - Model distillation (teacher/student model approach)

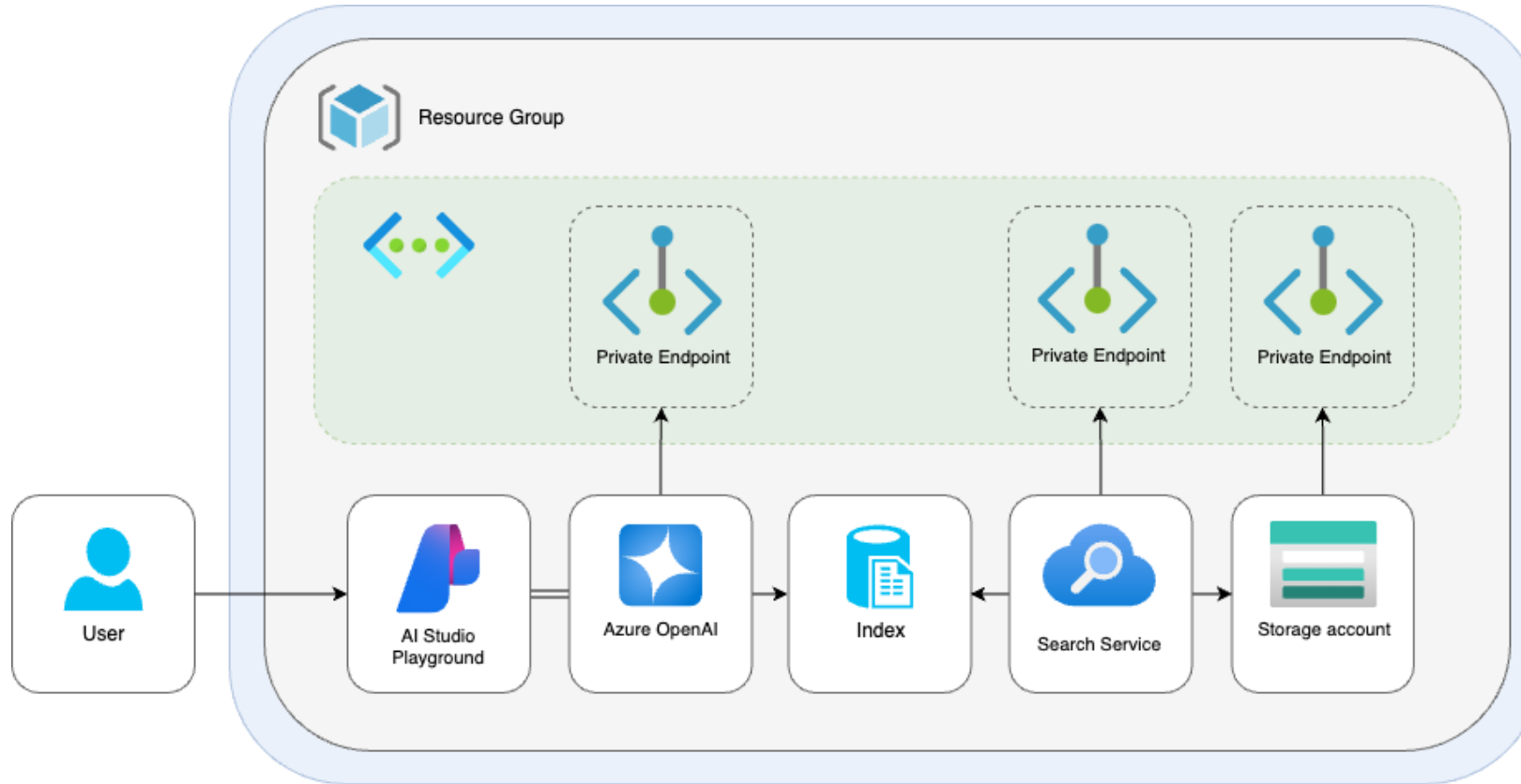
# Key Features & Capabilities

- Natural Language Processing (NLP)
  - Text generation, sentiment analysis
- Machine Learning and Deep Learning Models
  - GPT-3/4, Codex
- Data Integration
  - Easy integration with Azure Data Services
- Security & Compliance
  - Meets various industry standards (GDPR, HIPAA)

# Use Cases

- Customer Service Automation
  - Chatbots
- Content Generation
  - Blogging
- Predictive Analytics
  - Business forecasting
- Software Development Assist
  - Code completion, documentation

# Architecture Overview





# Getting Started with Azure OpenAI

- Prerequisites
  - Azure Subscription
  - Approved access to [Azure OpenAI Service](#)
    - Not necessary anymore for regular model's excluding o1 and o1-mini
- Azure Resources
  - Resource Group
  - Azure OpenAI Service
  - Azure Virtual Network (if API only private available)

# Demo: Building Infrastructure in Azure

Flavio Meyer



# Best Practices & Optimization

- Best Practices
  - Security best practices (API Keys, Managed Identities, Private Endpoints)
  - Azure API Management
  - Cost management
- Optimization Tips
  - Scale resources as needed
  - Monitor and analyze usage patterns

# Future Outlook

- Upcoming Features
  - New model integrations in various Azure regions
  - Enhanced performance features
- Industry Trends
  - Increasing adoption of AI
  - Enhanced AI ethics and governance

# Question & Answers



Survey / Thank you

