

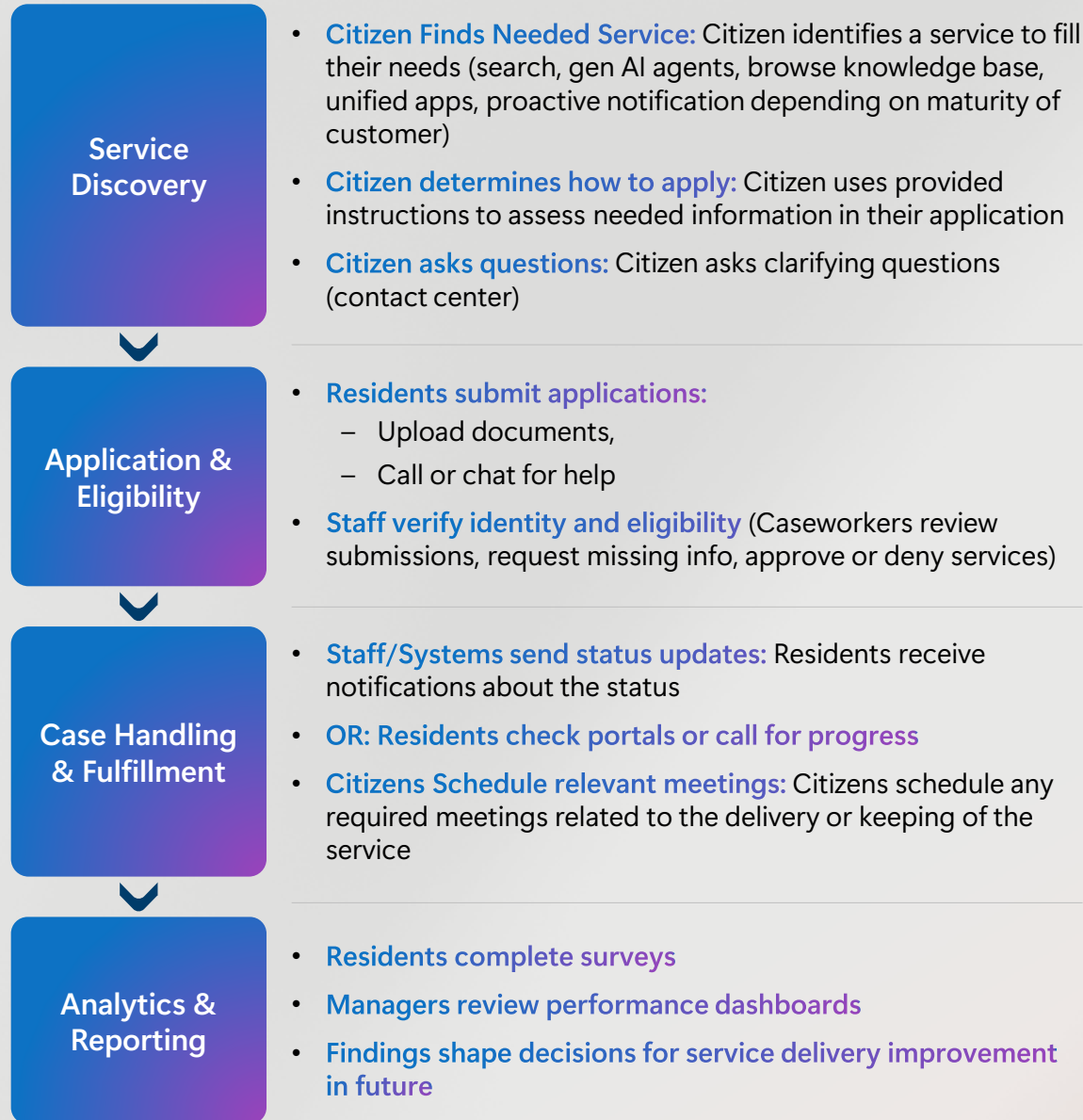


Improve Civic Experience & Engagement (Unified Applications)

Reference Architecture



Improve Civic Experience & Engagement (Unified Applications)



AI Hotspots

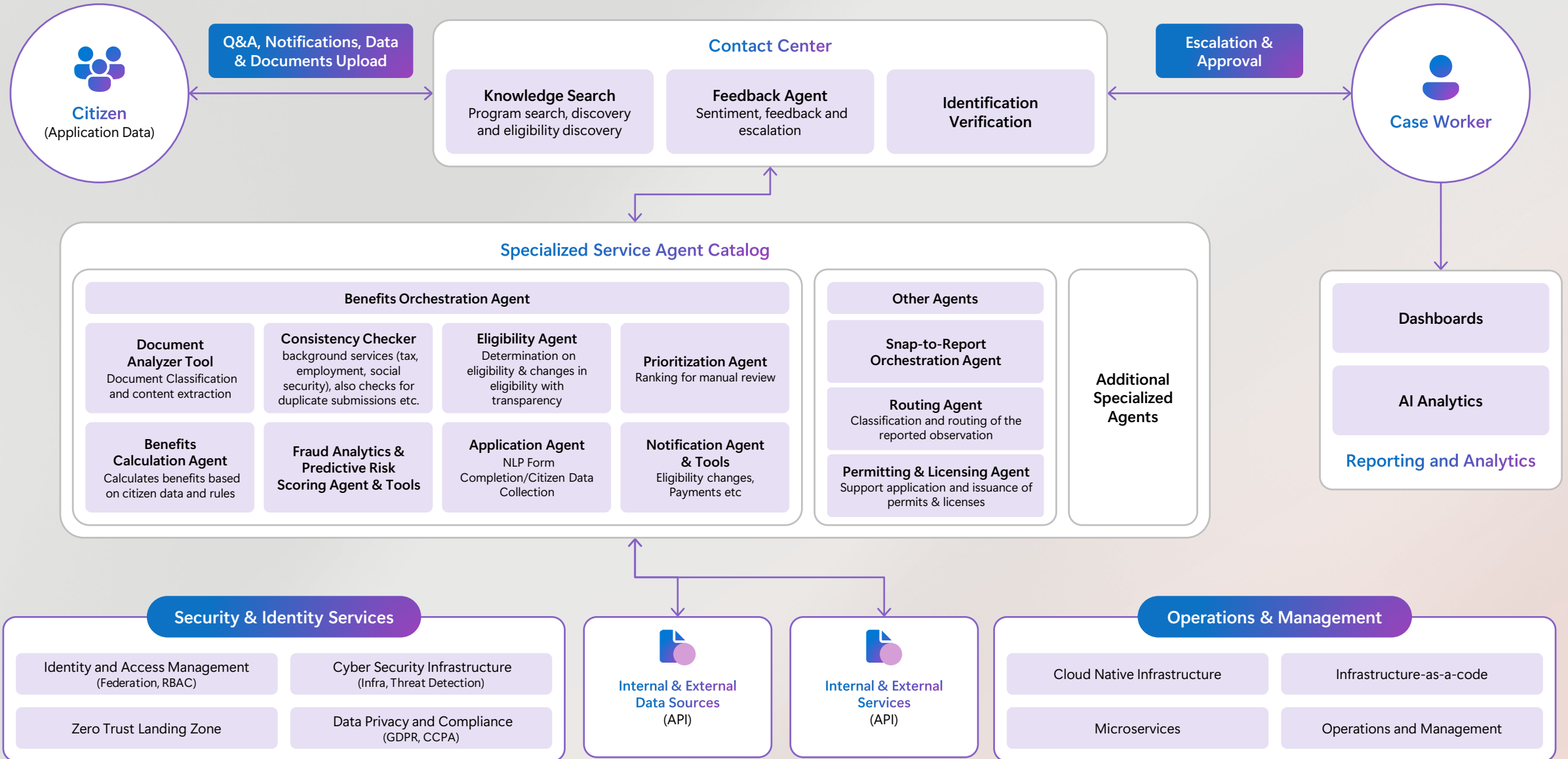
- **AI site search & semantic retrieval** with policy-aware grounding (reduces “dead ends”)
- **Eligibility pre-screen bot:** Dialog asks 4–8 questions to route to the right program
- **Multilingual/reading-level adaptation:** On-the-fly translation + plain-language simplification
- **Proactive nudges:** Geofenced/service alerts (e.g., storms, benefits enrollment windows)

- **Adaptive forms:** Dynamically prune questions using answers & known data
- **Document intelligence:** Classify/extract (pay stubs, leases); quality checks; redaction
- **Rules + ML triage:** Policy-encoded rules engine with ML risk scoring for referrals
- **Explainable decisions:** Natural-language “why you qualify/don’t,” with appeals steps
- **Proactive status notifications:** SMS/email in preferred language; next-step checklists

- **Agent assist:** Summarize case history, propose next best action, draft outreach messages
- **Predictive prioritization:** SLA breach risk, no-show risk, churn risk; workload balancing
- **Workflow copilots:** Turn policy into checklists; verify compliance steps are completed
- **Provider matching:** Recommend provider based on availability, proximity, outcomes

- **AI analytics:** Identify bottlenecks and equity gaps;
- **Content optimization:** Suggest clearer instructions
- **Quality assurance:** Auto-audit case notes for completeness & policy compliance

Solution building blocks & flow



Contact Center Architecture Flow

1 Customers

- Voice
- SMS
- Email
- Web Chat
- Social
- Teams

2 Azure Communication Services

Self Service

4 Copilot Studio

- Chatbots
- Voicebots (IVR)

5 Routing

6 Agent Experience

- Bot Handoff to Agent with Full Context
- Embedded or Standalone Desktop
- Case Management
- Knowledge "Chat" based on Semantic Indexing of multiple sources
- Real-Time Transcription and Translation, Sentiment Analysis
- AI Suggested Next Steps
- 8 Copilot with 3P CRM**
Gen AI Email and Follow Up Suggestions, Case & Conversation summary

10 Supervisors/Managers

- Real-Time Monitoring/Analytics including "Whisper" and Barge-in
- Forecasting
- Scheduling
- Gen AI suggestions for optimization

7 Connector

Collaborate

Consult/Transfer an expert over VoIP, on a Teams call and more

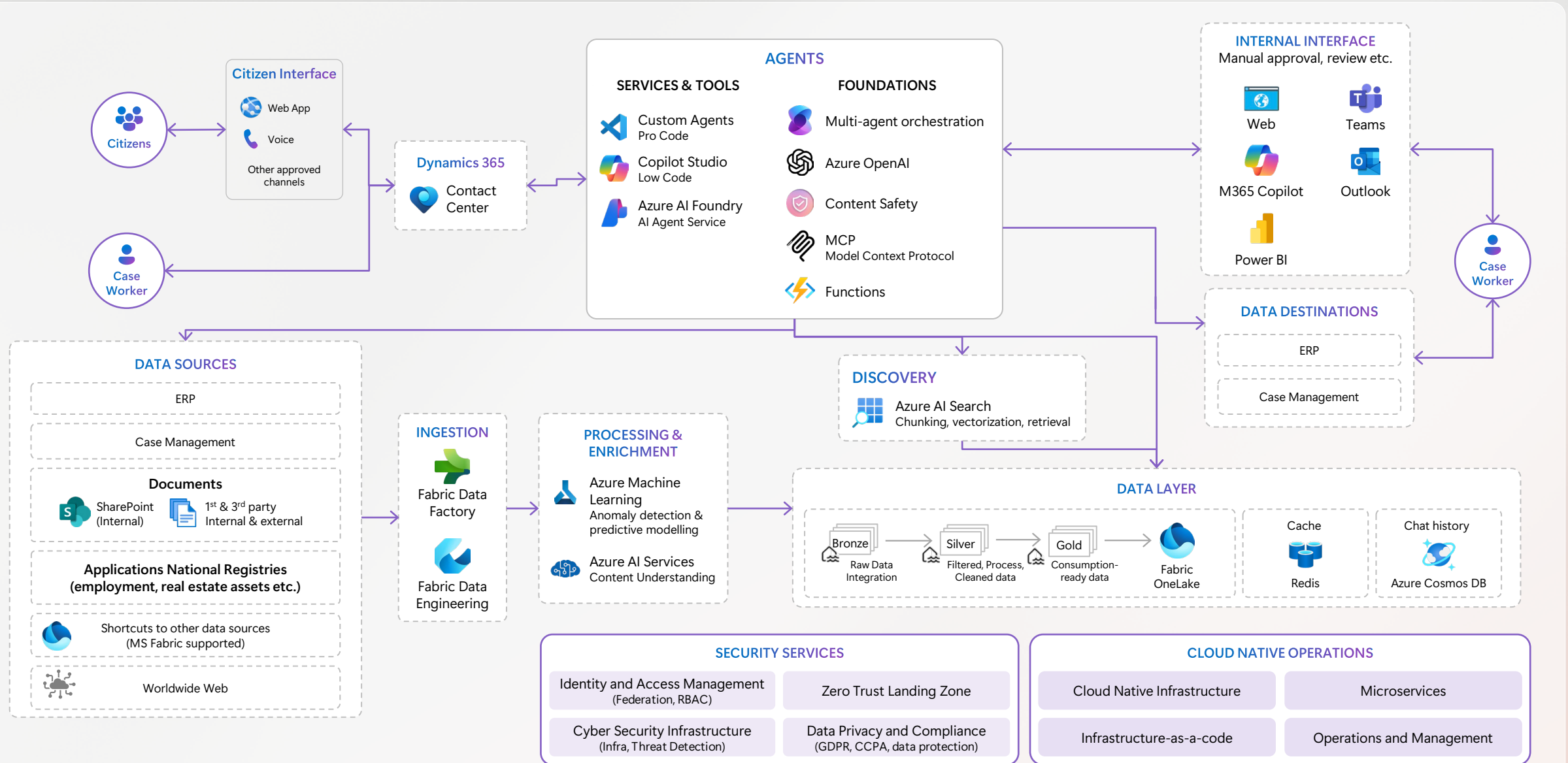
9 Power Platform

3 Existing CRM data platform and cloud

Microsoft Azure

Dynamics 365 Contact Center

Component Architecture – Technology Mapping





Thank you



Azure AI Foundry
Azure Cosmos DB
Semantic Kernel

Multi-Agent Custom Automation Engine

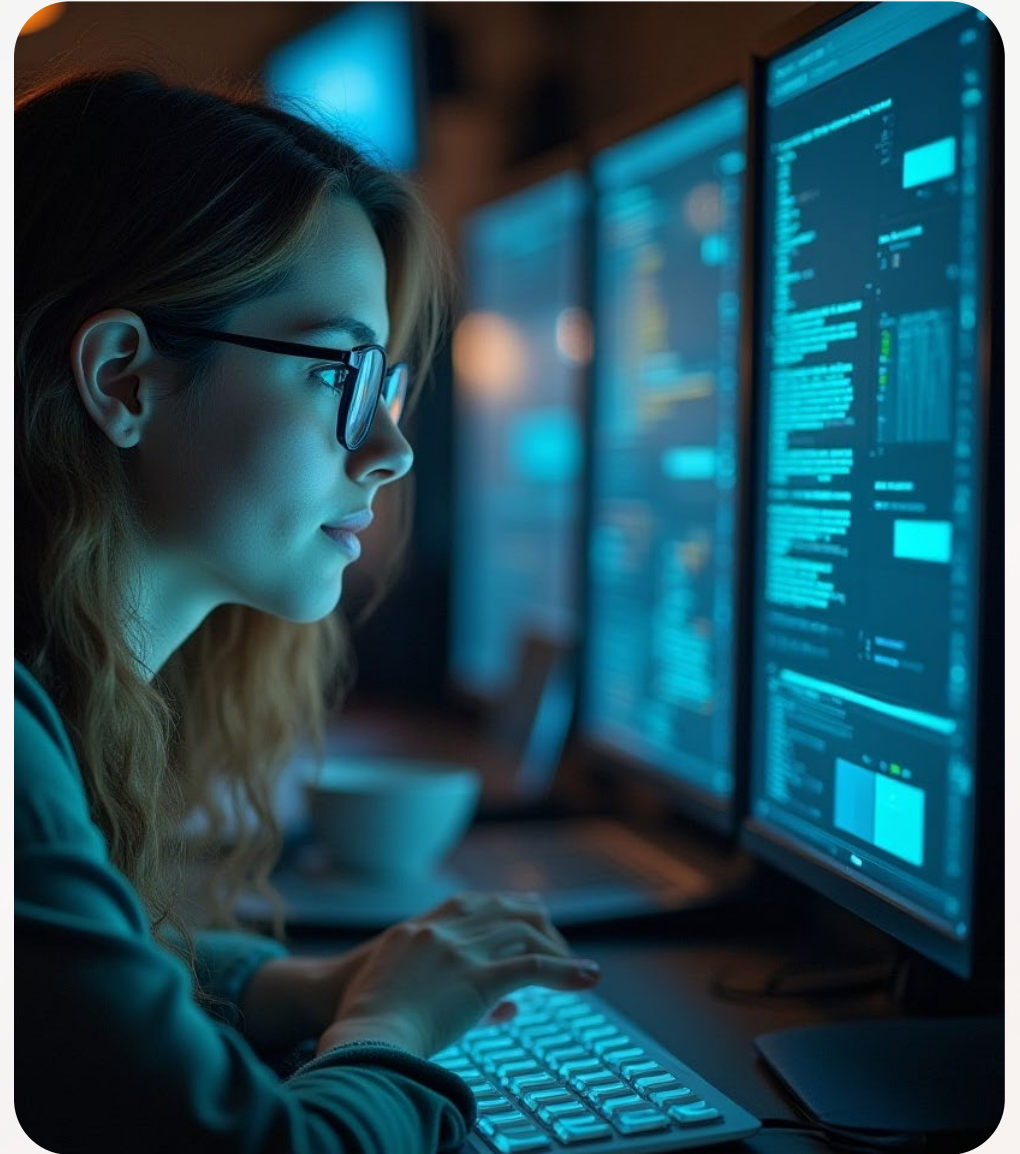
Solution Accelerator





Overview

The Multi-Agent Custom Automation Engine is a simple web app with a modular design that supports flexible automation and lets users recruit intelligent agents, combining Azure AI Foundry and Semantic Kernel to orchestrate complex tasks through reasoning-based methods, to plan, and act efficiently.



Customer challenges



Lacking the right Agents at scale

Difficulty engaging appropriate agents when obstacles arise. Success depends on context, timing, and task alignment.



Limited automation in complex workflows

Manual processes slow collaboration, increase overhead, and create inefficiencies when planning across teams.



Difficulty ensuring accuracy and safety

Fragmented data and emerging risks make it hard to find accurate solutions, leading to delays and inconsistent results.



Compliance and Governance gaps

Limited observability and lack of WAF-aligned controls make it challenging to secure workflows at scale.

Key features



Context-aware reasoning

Leverage reasoning models to handle complex, multi-step tasks with greater contextual awareness and decision-making capabilities.



Unified dynamic workspace

A unified platform that empowers users to seamlessly complete a range of tasks with integrated tools, AI guidance, and streamlined workflows.



Multi-scenario agent team setup

Scale agents with the same organizational strategies you apply to your human teams ensuring consistency and operational alignment.



WAF-aligned installation

Supports installation workflows aligned with Azure Well Architected Framework (WAF), standards, ensuring secure and compliant deployment.

Business outcomes



Automated tasks with reasoning power

Leverage AI agents to reconcile fragmented data, complete common tasks efficiently, save valuable time, and deliver highly tailored recommendations.



Scalable workflow integration

Easily scale and adapt AI agents to different business needs, ensuring flexibility and consistent execution as priorities shift ensuring quality uniform procedures.



Optimized agent orchestration

AI agents recruit only the necessary agents for valid reasons at the right time to ensure work gets done efficiently to accomplish intricate tasks quickly.

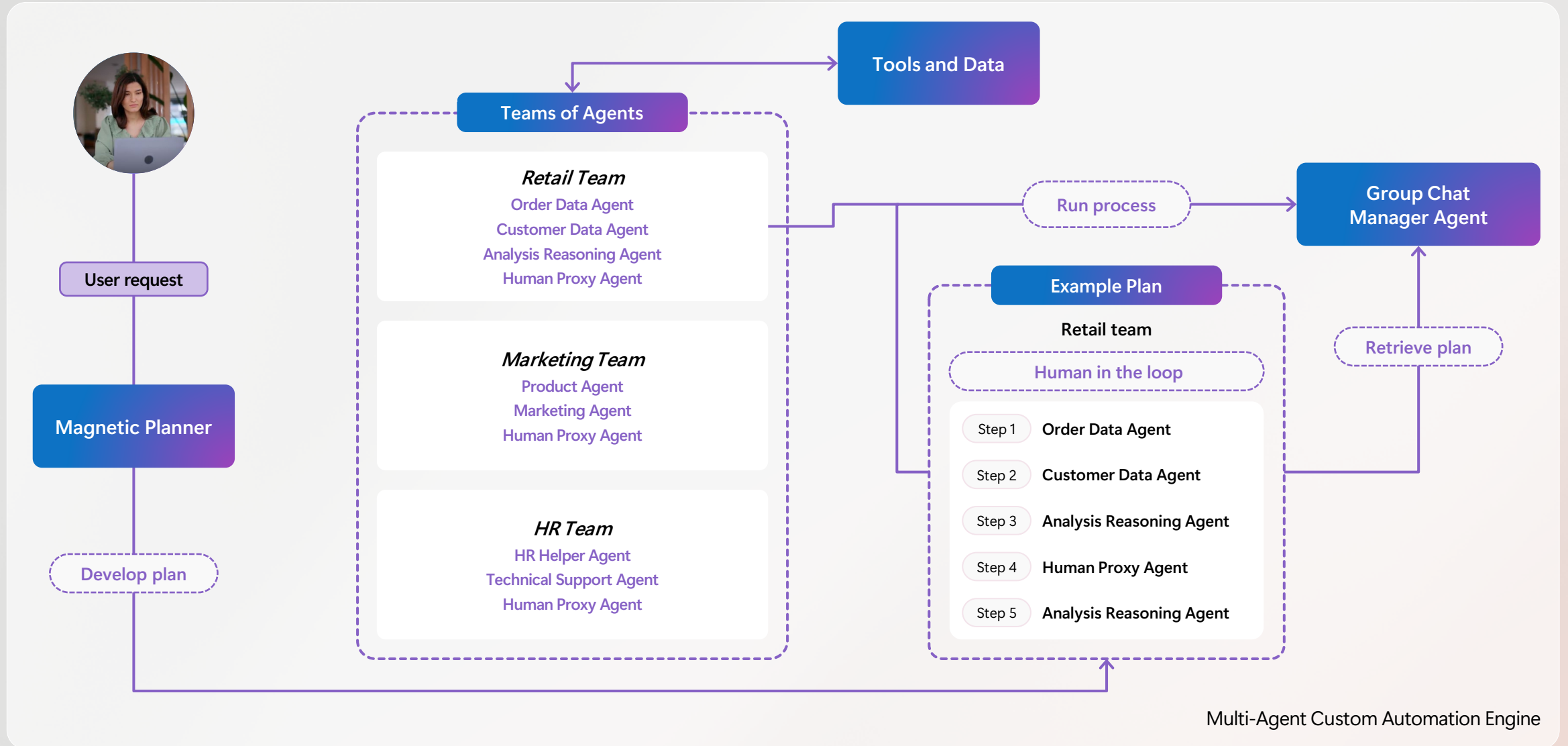


Secure data with responsible AI

Enhance data security and WAF compliance to reduce breaches, support responsible AI adoption, and drive innovation with a competitive edge.



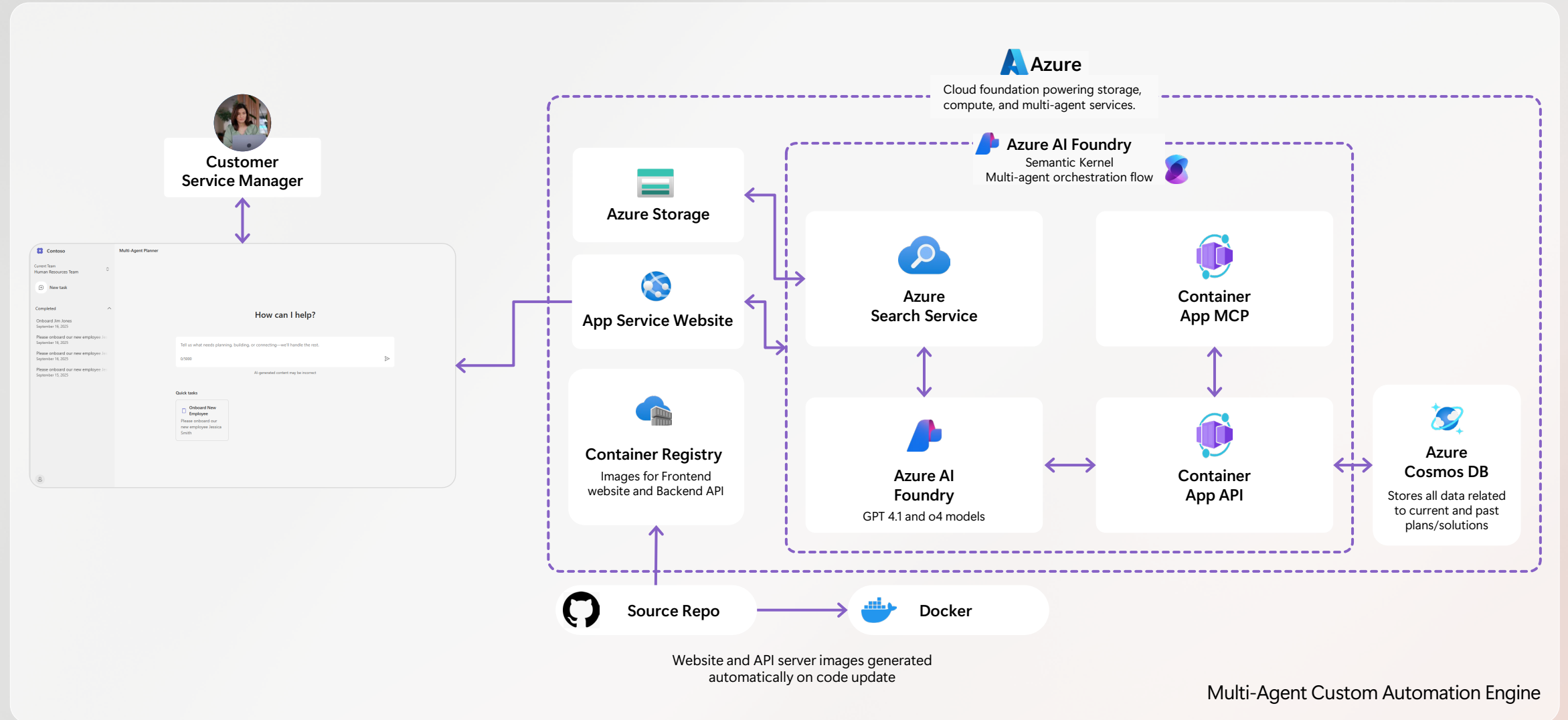
Multi-agent orchestration flow





Accelerator architecture

Full architecture diagram for the solution accelerator





Unify your data

Unified data foundation with Fabric

Solution accelerator

Fabric

OneLake

Azure Databricks

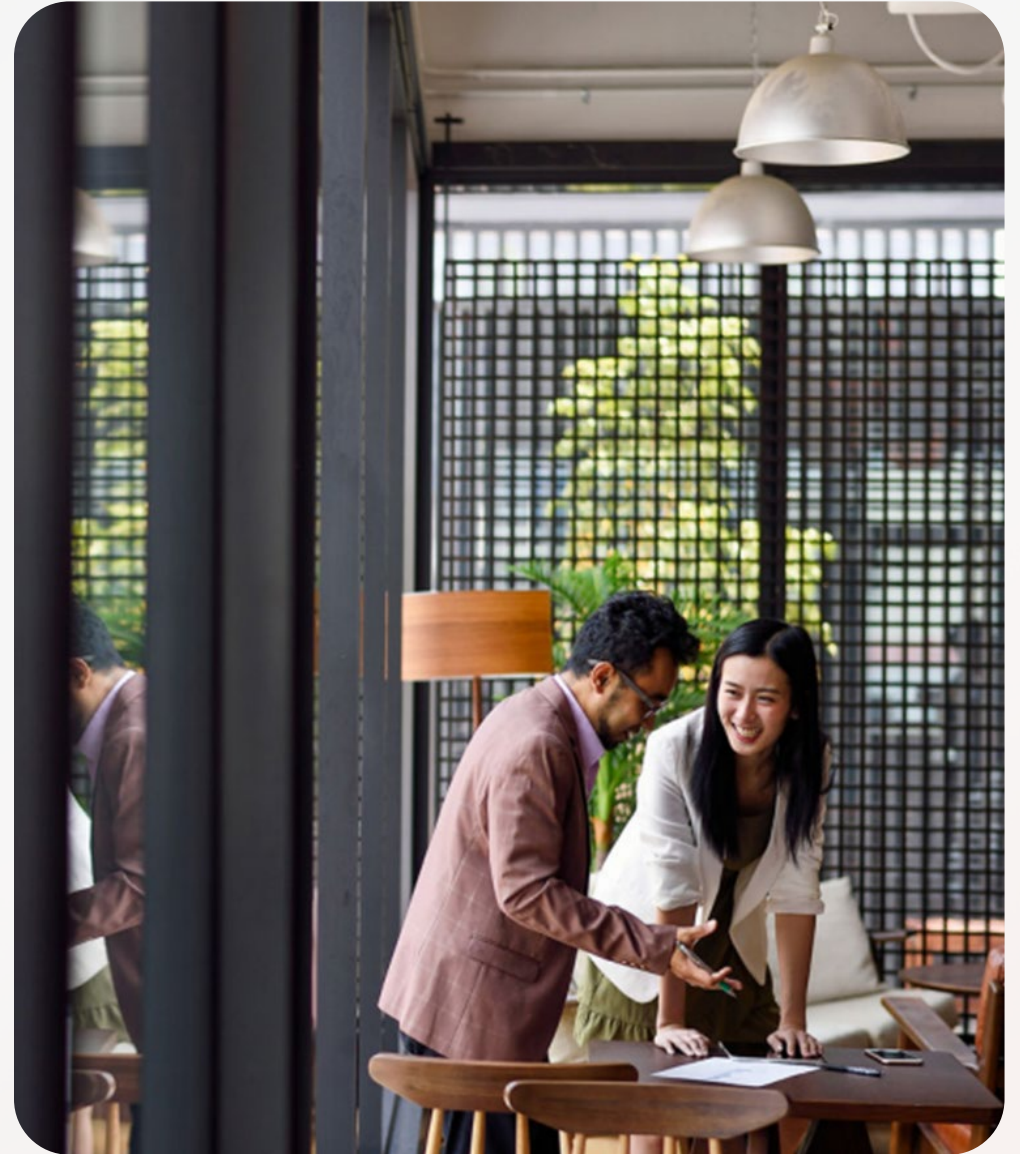
Purview





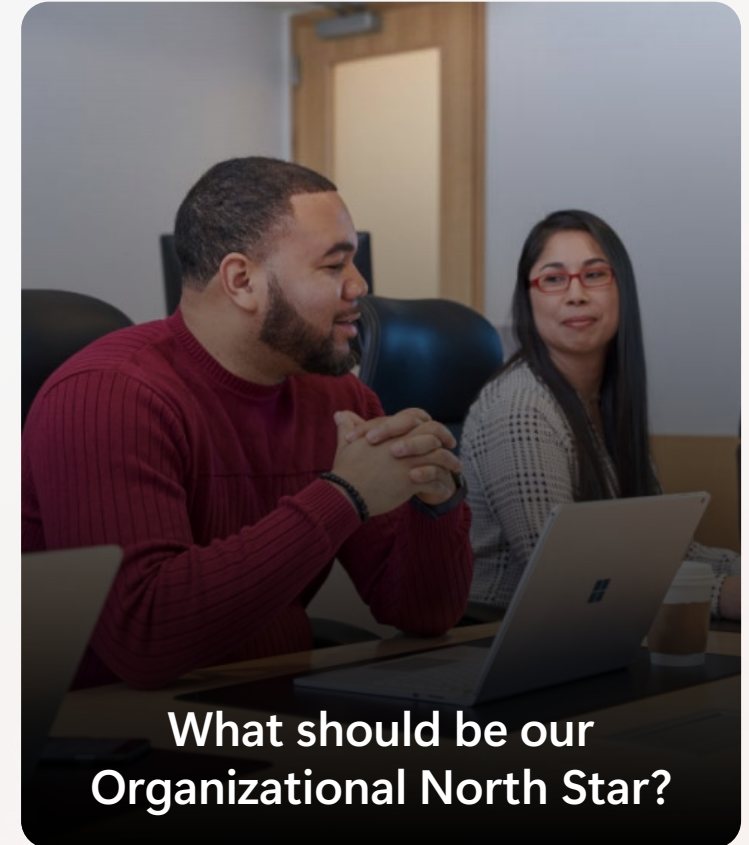
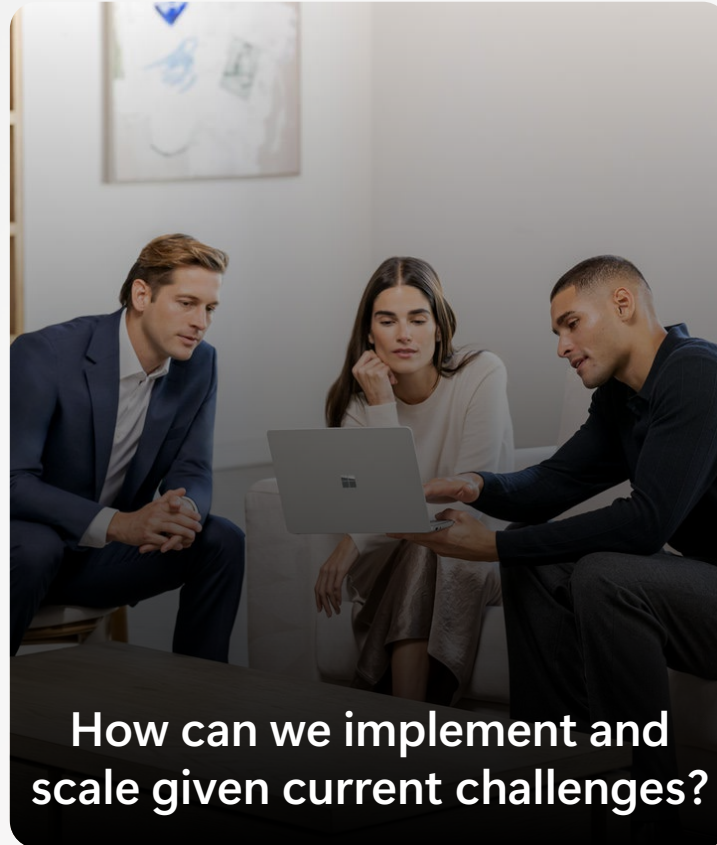
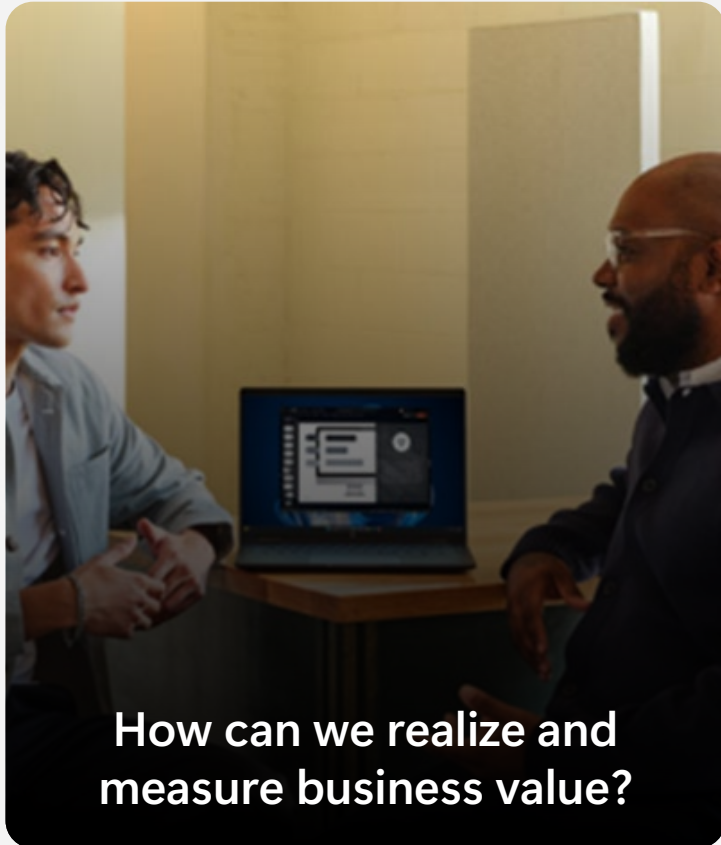
Overview

Establish a unified data foundation in Fabric to enable decision making and achieve scalable insights by leveraging the Modern Analytics, AI and Governance framework (MAAG) for your enterprise data assets.



Organizational trends

What organizations are asking



Technical key features



Unify your data estate

Build a connected, AI-ready data foundation with MAAG using a single, trusted architecture across data domains with OneLake.



Support multi-platform data integration

Build medallion architecture, establish mirroring, and shortcuts to rapidly onboard structured and unstructured data into Fabric.



Enable Agentic AI features

Activate agents powered by Fabric's data agent and AI Foundry, to flexibly extend and deploy across Copilot Studio, Foundry, and web applications.



Unlock new insights

Interact with Power BI reports using natural language to ask questions, uncover trends, and generate insights instantly with Copilot.



Secure your data

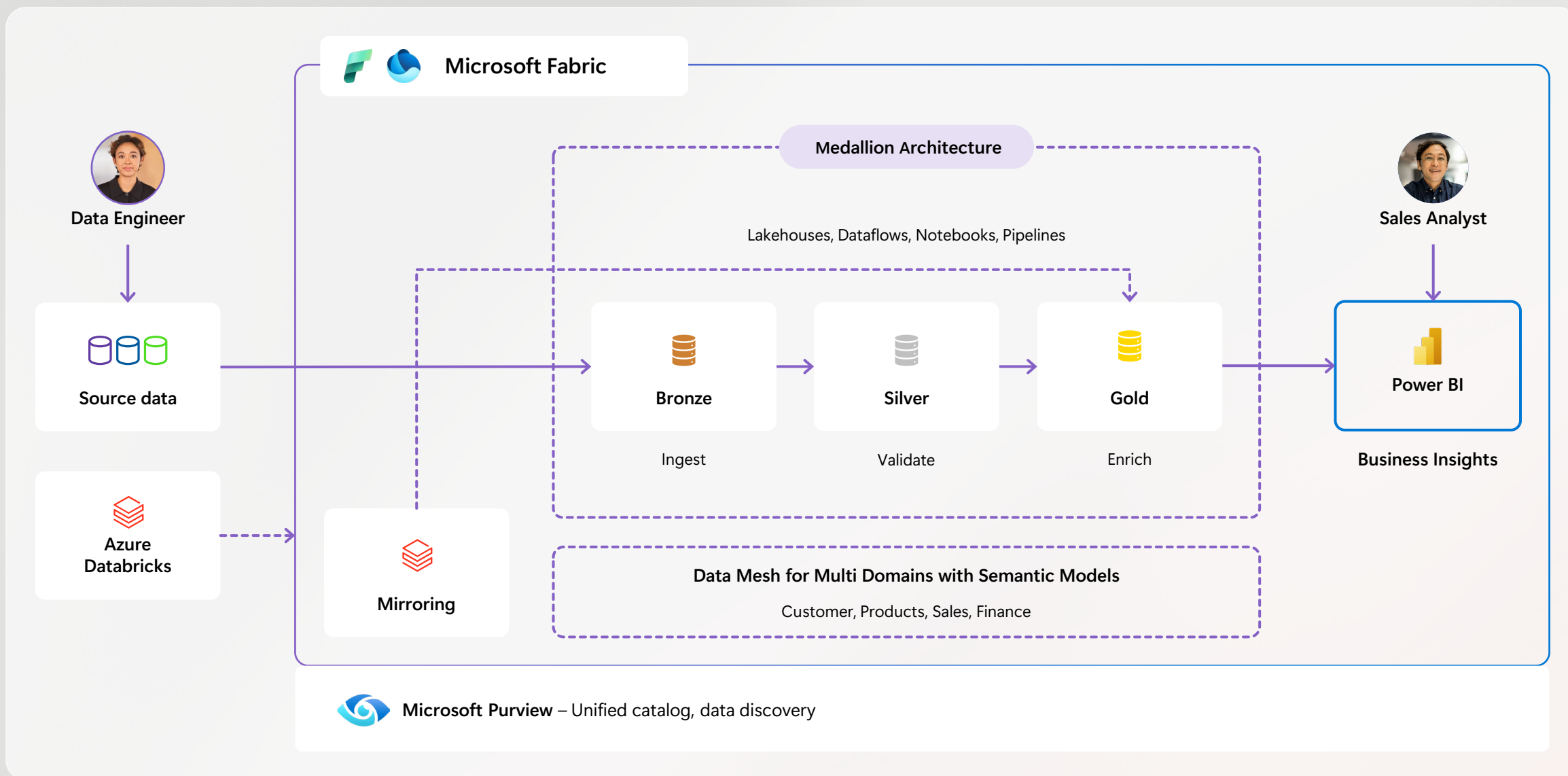
Protect data assets across OneLake with built-in governance, DLP, IP protection, and security controls.



Discover and Govern data

Generate a data marketplace built on Purview to ensure secure access, data quality, and visibility across domains.

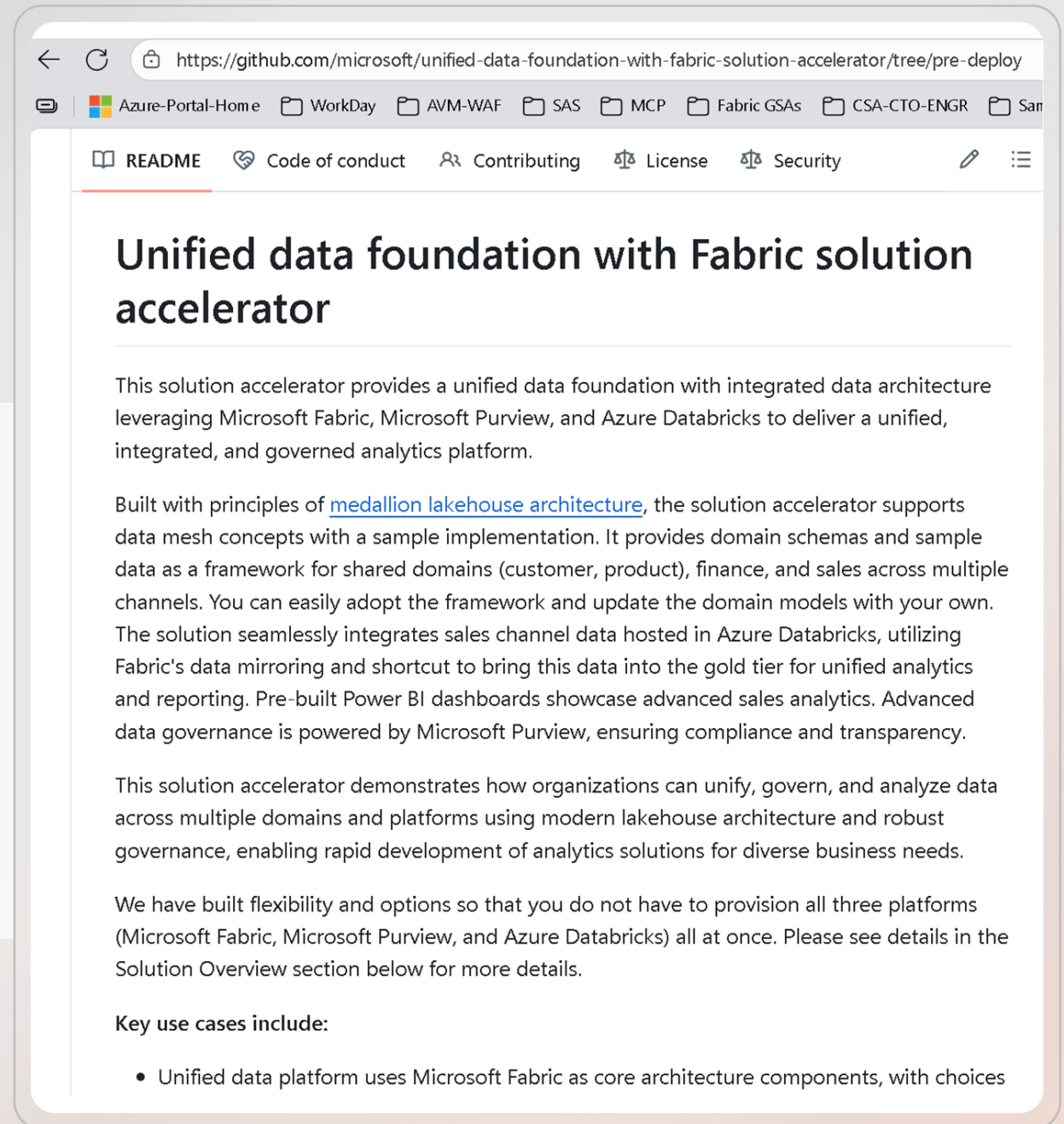
Accelerator architecture



GitHub repository

Access the GitHub repo to deploy this data accelerator

GitHub repo

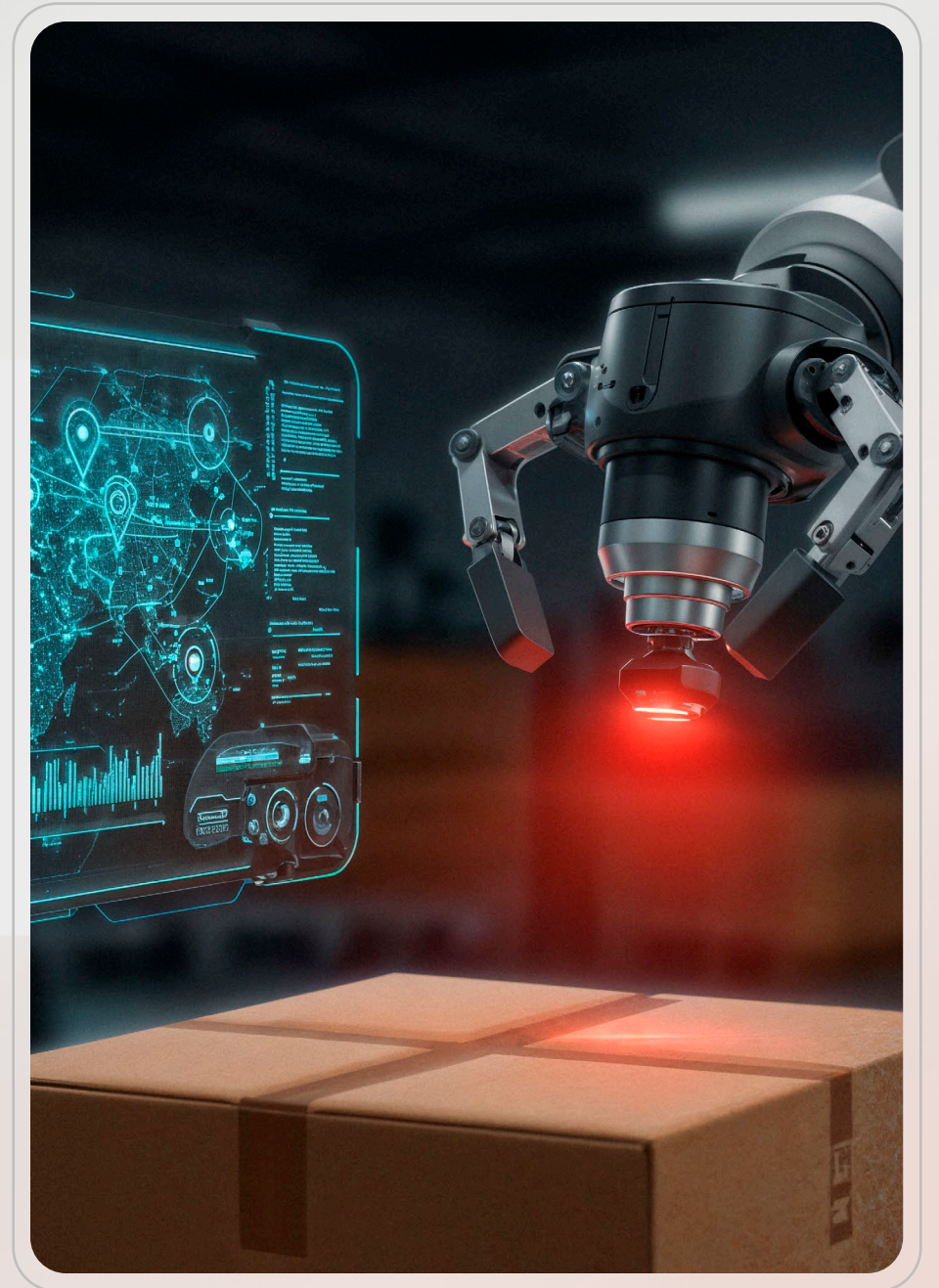
A screenshot of a web browser displaying a GitHub repository page. The address bar shows the URL: https://github.com/microsoft/unified-data-foundation-with-fabric-solution-accelerator/tree/pre-deploy. The browser's tab bar includes several open tabs: Azure-Portal-Home, WorkDay, AVM-WAF, SAS, MCP, Fabric GSAs, CSA-CTO-ENGR, and San. The repository page header includes links for README (highlighted), Code of conduct, Contributing, License, and Security. The main content area features the title "Unified data foundation with Fabric solution accelerator" and a description: "This solution accelerator provides a unified data foundation with integrated data architecture leveraging Microsoft Fabric, Microsoft Purview, and Azure Databricks to deliver a unified, integrated, and governed analytics platform." Below this, it states: "Built with principles of [medallion lakehouse architecture](#), the solution accelerator supports data mesh concepts with a sample implementation. It provides domain schemas and sample data as a framework for shared domains (customer, product), finance, and sales across multiple channels. You can easily adopt the framework and update the domain models with your own. The solution seamlessly integrates sales channel data hosted in Azure Databricks, utilizing Fabric's data mirroring and shortcut to bring this data into the gold tier for unified analytics and reporting. Pre-built Power BI dashboards showcase advanced sales analytics. Advanced data governance is powered by Microsoft Purview, ensuring compliance and transparency." Another paragraph reads: "This solution accelerator demonstrates how organizations can unify, govern, and analyze data across multiple domains and platforms using modern lakehouse architecture and robust governance, enabling rapid development of analytics solutions for diverse business needs." A final paragraph says: "We have built flexibility and options so that you do not have to provision all three platforms (Microsoft Fabric, Microsoft Purview, and Azure Databricks) all at once. Please see details in the Solution Overview section below for more details." The page concludes with the heading "Key use cases include:" followed by a single bullet point: "• Unified data platform uses Microsoft Fabric as core architecture components, with choices".



WAF
AI Foundry

Deploy Your AI Application in Production

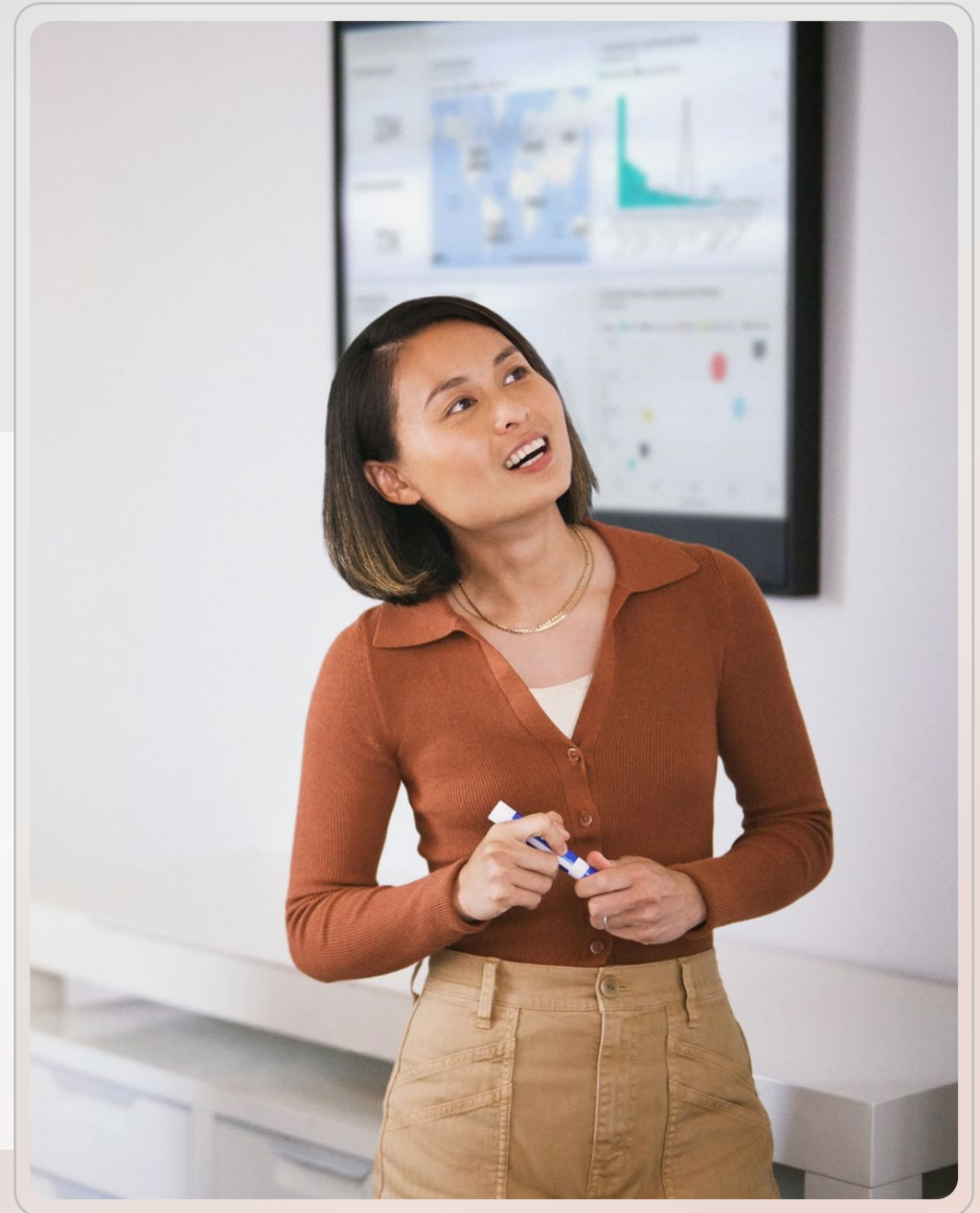
Solution Accelerator



Deploy a secure, extensible and integrated environment to run your AI applications in production



It simplifies the process of including essential Azure services necessary to run mission-critical AI applications and adhere to Microsoft Well Architected Framework recommendations.



Industry Challenges



High Failure Rates

Only 54% of AI projects move to production, and 88% of AI pilots fail to reach production.

Scaling Difficulties

76% of decision makers report trouble scaling AI efforts.

Skill Gaps

Only 35% of tech practitioners believe their organizations have the necessary skills for complex AI projects.

Extended timelines

Companies average 7+ months from pilot to production.

References

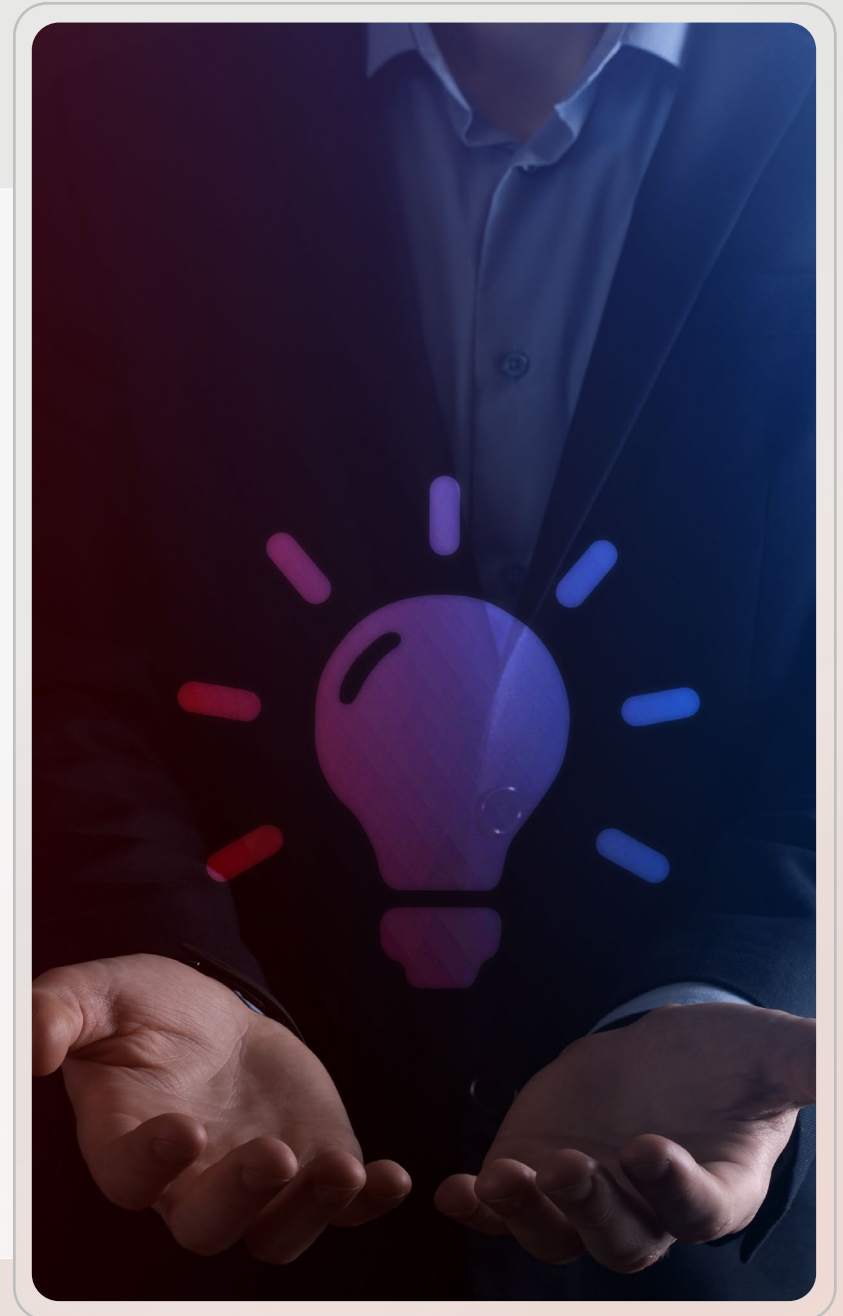
[1] [Azure AI Infrastructure-Master](#) | [2] [FY25 Build and Modernize AI Apps MPF July 2024](#) | [3] [AI Adoption in 2024: 74% of Companies Struggle to Achieve and Scale ...](#) | [4] [New Research Highlights Obstacles Companies Are Facing In Using AI – Forbes](#) | [5] [88% of AI pilots fail to reach production—but that’s not all on ITa](#)

The Solution



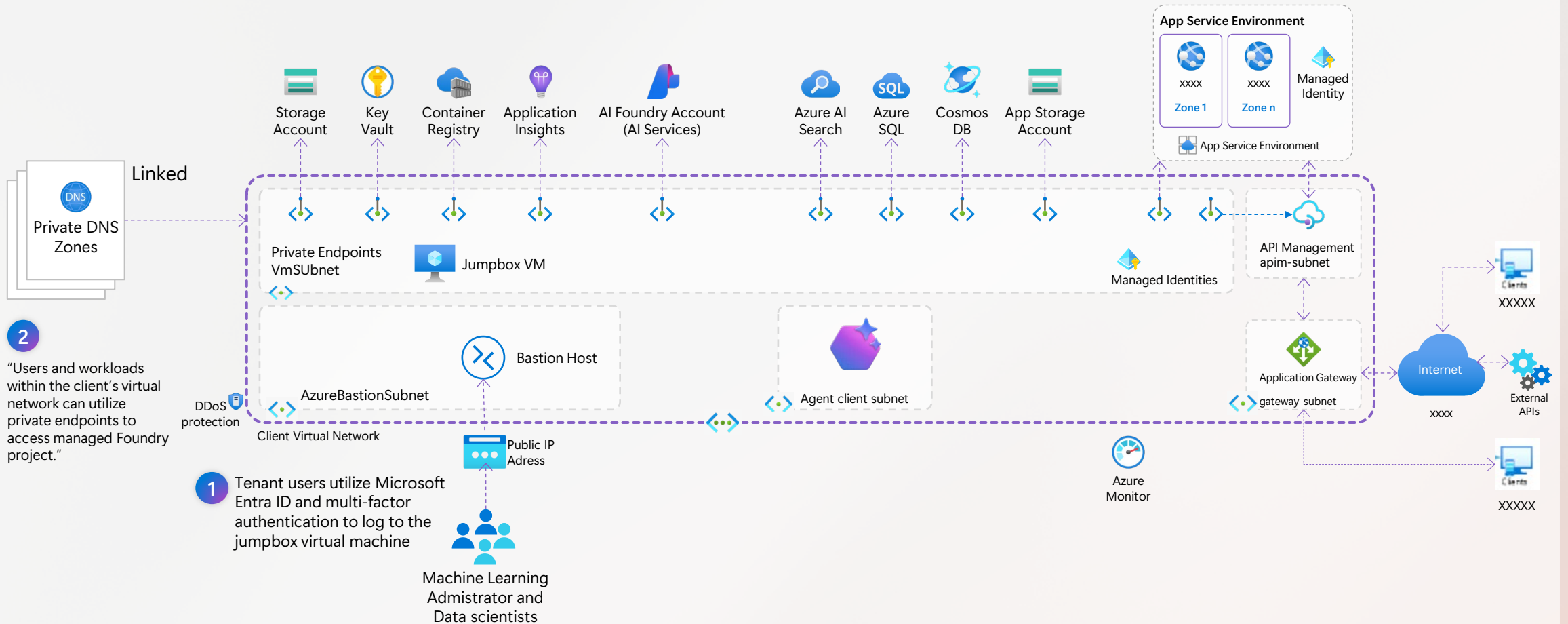
While Proof of Concept (PoC) templates focus on agility and rapid validation, production environments address factors such as **enterprise security, compliance, scalability, and ongoing maintenance**. As a result, in addition to the services included in PoC Template, the “Deploy your AI Application in Production” template **disable public access to AI Foundry services and creates:**

- An **Azure Virtual Network** used to isolate resources from the Internet
- **Azure Bastion** and the deployment of a **Virtual Machine** “jump box” to securely access the environment.
- **Private endpoints** and **DNS Zones** to Azure services.
- **Network Security Groups** (NSG’s) with Zero-Trust policies.
- The option to deploy AI Search and Cosmos DB, along with APIM, Azure SQL, App Services, Container Registry and logging/monitoring.



Solution architecture

Deploy your AI Application in Production



Getting Started

Access the template from AI Foundry studio → Template → Deploy your AI application in production

[Open in GitHub](#)



Azure AI Foundry / FRGORON-AI-TEST / Templates

Work from a template

Templates and tutorials VS Code container

Check out these step-by-step instructions for coding AI right into your apps. If you prefer to learn by following written instructions with code snippets, try a tutorial. If you'd rather dive right into the code, clone a template repository into your environment or open it in GitHub. [View additional code templates](#)

Get started with AI chat

Basic

Create and deploy a basic chat application integrated with your data and telemetry insights using Azure Container Apps.

[Azure AI Model Inference API](#) [Azure OpenAI](#) [Azure AI Search](#)
[Azure Container Apps](#) [Application Insights](#)

[Open in GitHub](#)

Get started with AI agents

Basic

Create and deploy a basic agent application with actions and telemetry insights using Azure Container Apps.

[Azure AI Agent Service](#) [Azure OpenAI](#) [Azure AI Search](#)
[Azure Container Apps](#) [Application Insights](#)

[Open in GitHub](#)

Multi-modal content processing

Intermediate

Process claims, invoices, contracts and other documents quickly and accurately by extracting information from unstructured content and mapping it to a structured format. This template supports text, images, tables and graphs.

[Azure OpenAI](#) [Azure AI Content Understanding](#)
[Azure Cosmos DB](#) [Azure Container Apps](#)

[Open in GitHub](#)

Generate documents from your data

Intermediate

Accelerate generation of documents such as contracts, invoices and investment proposals by finding and summarizing relevant information from your data.

[Azure OpenAI](#) [Azure AI Services](#) [Azure AI Search](#)
[Azure Cosmos DB](#)

[Open in GitHub](#)

Modernize your code with agents

Intermediate

Migrate legacy code to modern languages by leveraging a team of agents.

[Azure AI Agent Service](#) [Azure OpenAI](#) [Semantic Kernel](#)
[Azure Cosmos DB](#) [Azure Container Apps](#)

[Open in GitHub](#)

Build your conversational agent

Intermediate

Leverage advanced conversational understanding to create and enhance chatbots and agents with deterministic and human-controllable workflows.

[Azure AI Language](#) [Azure OpenAI](#) [Azure AI Search](#)
[Azure Storage Account](#) [Azure Container Registry](#)

[Open in GitHub](#)

Unlock insights from conversational data

Intermediate

Improve contact center efficiency by uncovering insights from large audio and text-based data sets using advanced content understanding capabilities.

[Azure AI Agent Service](#) [Azure AI Content Understanding](#)
[Azure OpenAI](#) [Azure AI Search](#)

[Open in GitHub](#)

Deploy your AI application in production

When you're ready to scale up your POC application, start by using the deployment template below.

Deployment template

Deploy a secure, extensible and integrated environment to run your AI applications in production.

[Azure AI Projects](#) [Azure AI Services](#) [Azure Bastion](#) [Azure Vnet](#) [Azure Monitor](#)

[Open in GitHub](#)

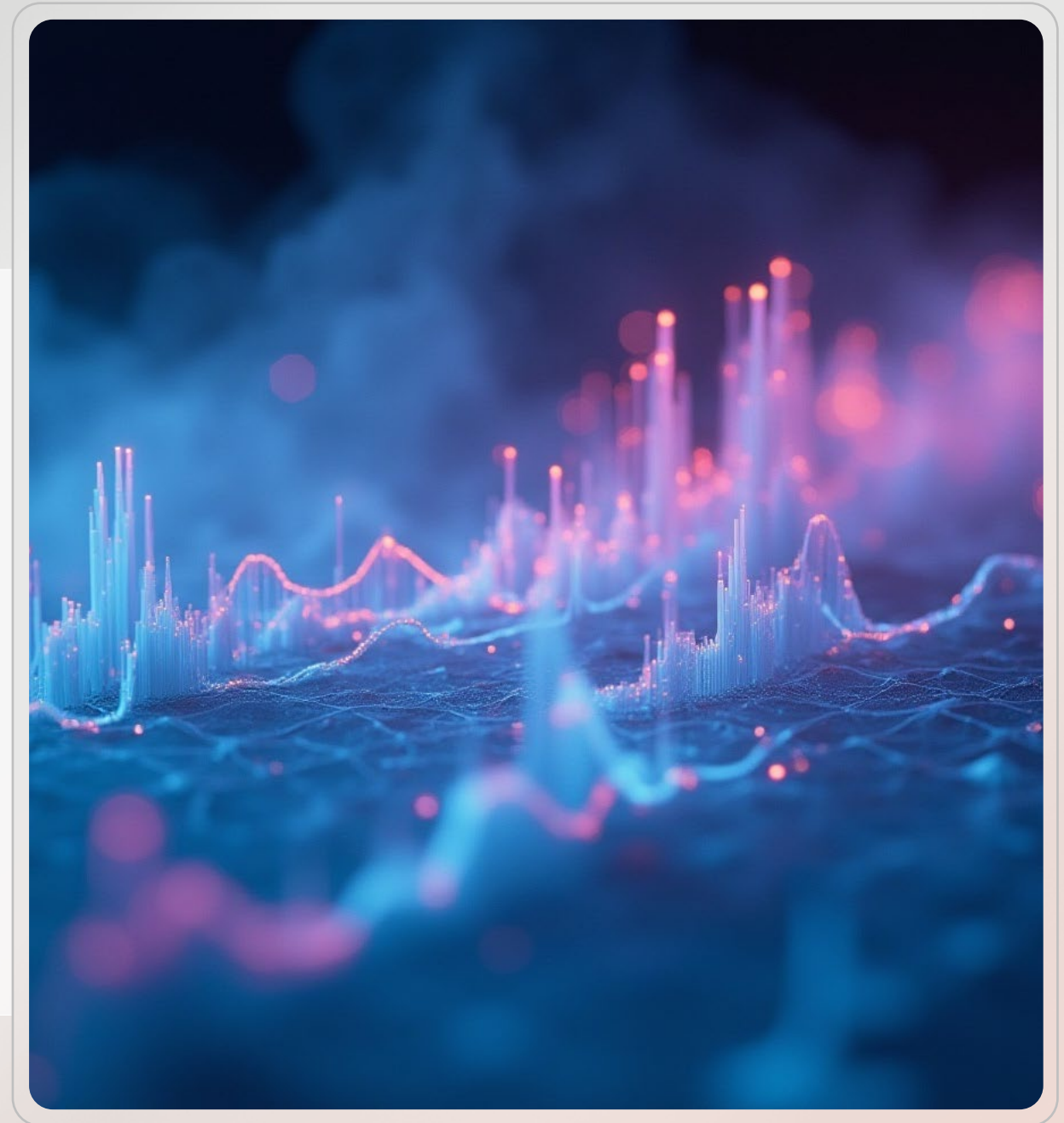
Demo

Dynamics 365 Contact Center

AI is transforming how services are delivered across industries from telcos & retail to healthcare & financial services. As a result, people expect similar hyper personalized & multichannel experience when engaging with their government, whether through a portal, apps, call center, or government office. In this demo, we'll showcase:

- Omni-channel access to services, integrated channels to provide a seamless and unified experience.
- Multi-lingual capabilities.
- Effortless self-service with AI-powered chatbots & voicebots/IVRs through Copilot, Microsoft's generative AI-assistant that can understand intent across multiple interactions over time and across various channels.
- Copilot experiences for agent-assisted service.
- Insights and analytics through a single view dashboard.

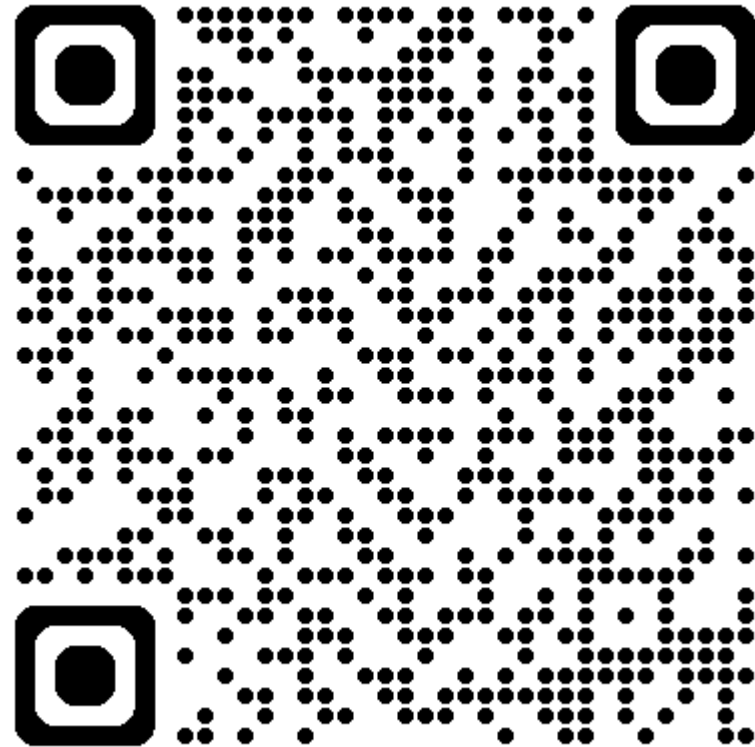
[Demo link](#)



Public Sector Skilling Resources

Public Sector Center of Expertise and Digital Skills

Tools and insights to drive digital innovation within the public sector. Discover valuable lessons, expert insights, skill-building resources, and best practices designed to accelerate your AI and digital transformation journey.





Thank you