



nordic. summit

From Concept to Intelligent Agent:
Build AI Agents with Copilot Studio and Azure AI Foundry



Katerina Chernevskaya

Power Platform Architect @ KPMG

From Concept to
Intelligent Agent



Katerina Chernevskaya

Power Platform Architect @ KPMG



Built so many agents, I'm just waiting for my coffee machine to demand governance policies



Katerina.Chernevskaya@oops-hub.com



/in/katerinachernevskaya



github.com/katerina-chernevskaya



aka.ms/powerplatform-samples



PICK YOUR FLAVOR:
COOKIE FOR QUICK WINS, GINGERBREAD FOR ENTERPRISE DREAMS



Schedule

- 08:30 – 09:30 Brain Boot-Up
- 09:30 – 09:45 Break
- 09:45 – 12:00 Deep Dive
- 12:00 – 13:00 Lunch
- 13:00 – 14:30 Post-Lunch Survival Mode
- 14:30 – 14:45 Break
- 14:45 – 16:00 Victory Lap & Wrap-Up

Labs

- Create Agent
- Extend agent with tools, triggers, topics
- Deploy Azure resources
- Configure AI Search and integrate with Agent
- BYOM
- Evaluation
- Agent in Azure AI Foundry

Workshop Lab Guidelines

No rush, no pressure – the goal isn't to finish every lab today. You'll keep all materials afterwards.

Focus on principles – what matters is understanding how to design AI solutions. Open discussions are welcome.

Flexibility encouraged – you're free to experiment and build your own agents, though we recommend starting with the lab steps first.

Ask for help – if you get stuck, let us know. We're here to support you.

Set your own pace – some move fast, others prefer to go deeper. Both are perfectly fine.

Stay curious – the labs are just a starting point. Use them as a playground for exploration.

Support each other – share discoveries, ideas, and insights with the group.



Better understanding
use cases **Power Platform**
Great prerequisites **Copilot Studio**
building blocks **experience** Look forward

agent building
agent AI Foundry

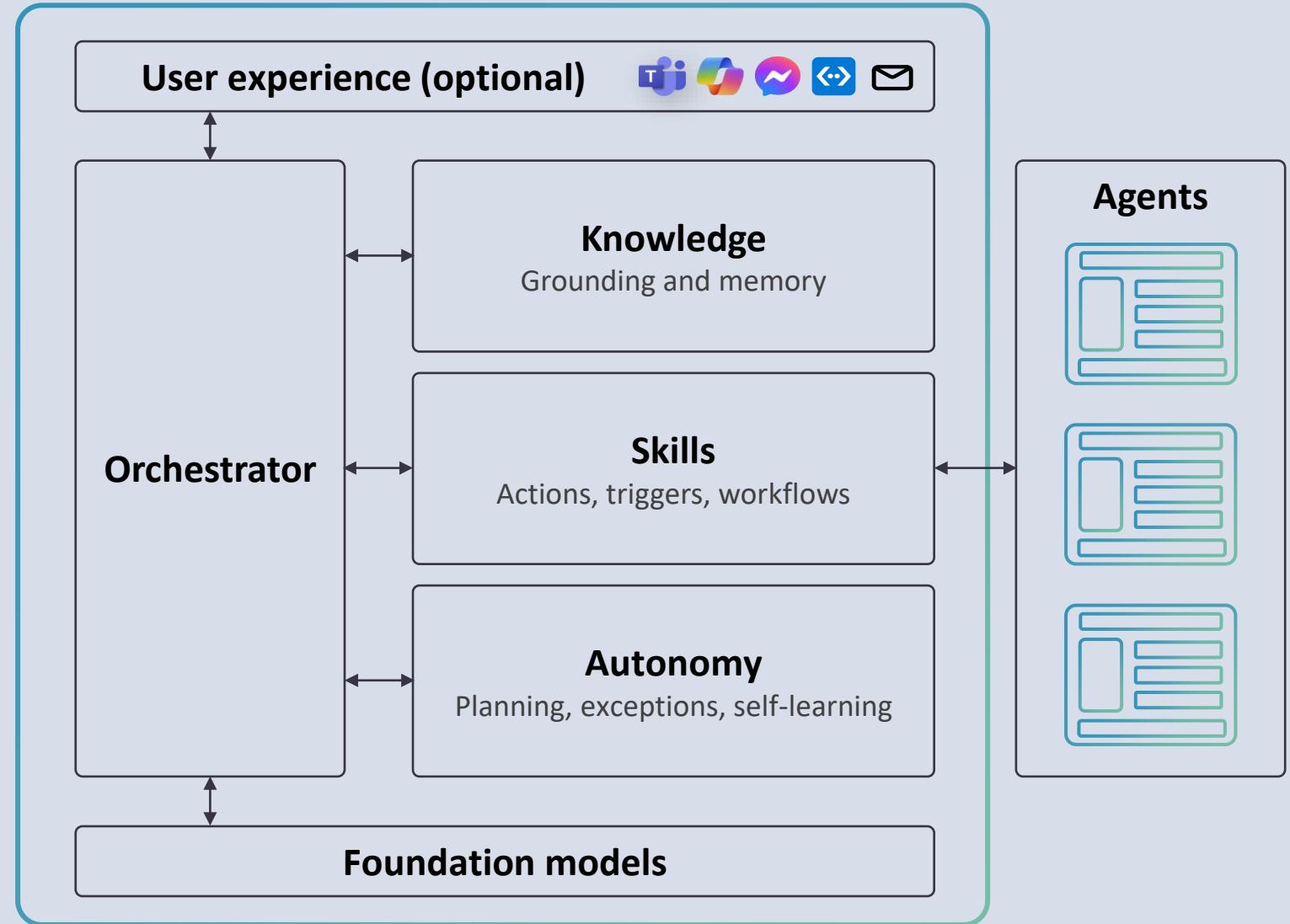
Azure building team
Studio agents Customer Service
code and the pro
code peeps
code/developers

previously only worked

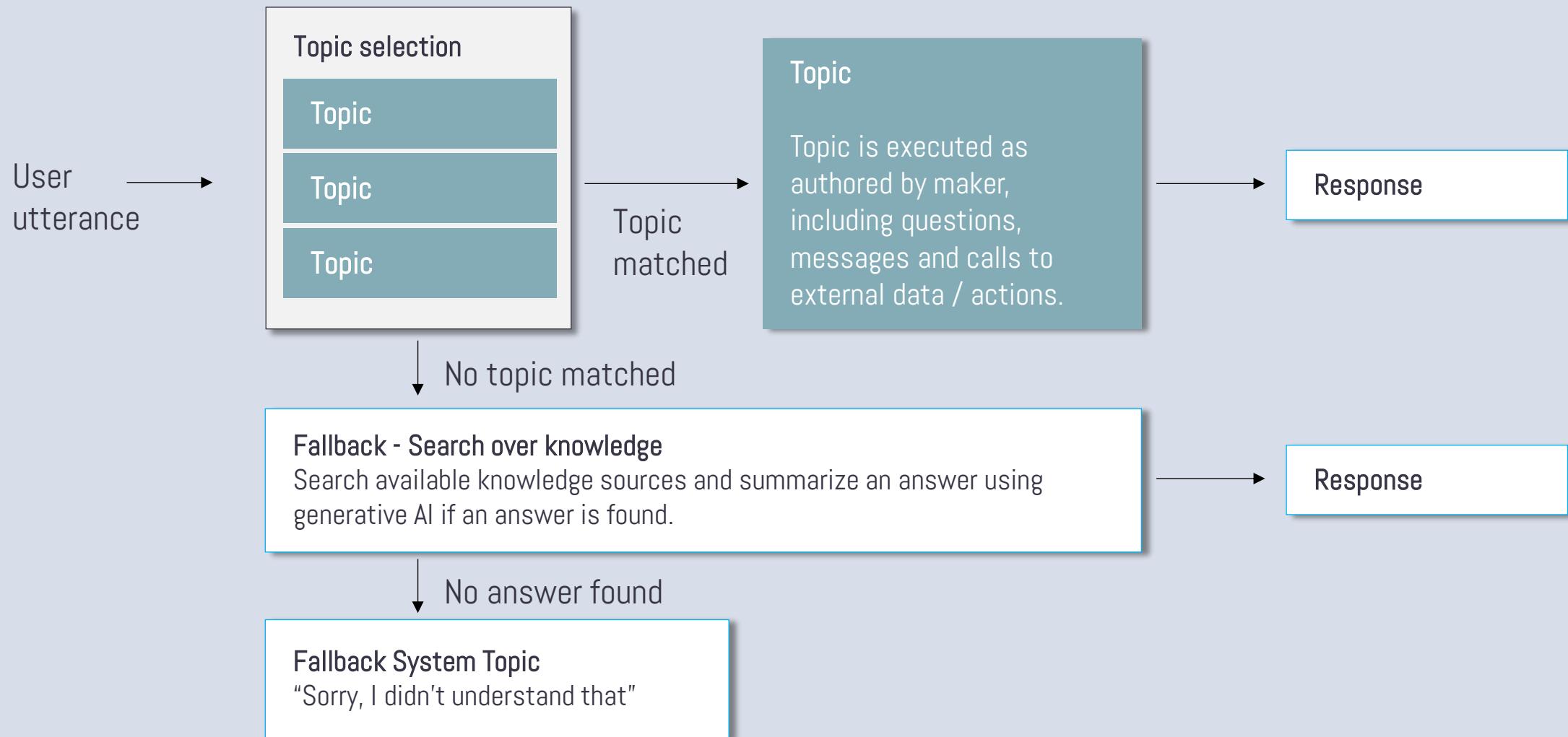


Agents anatomy

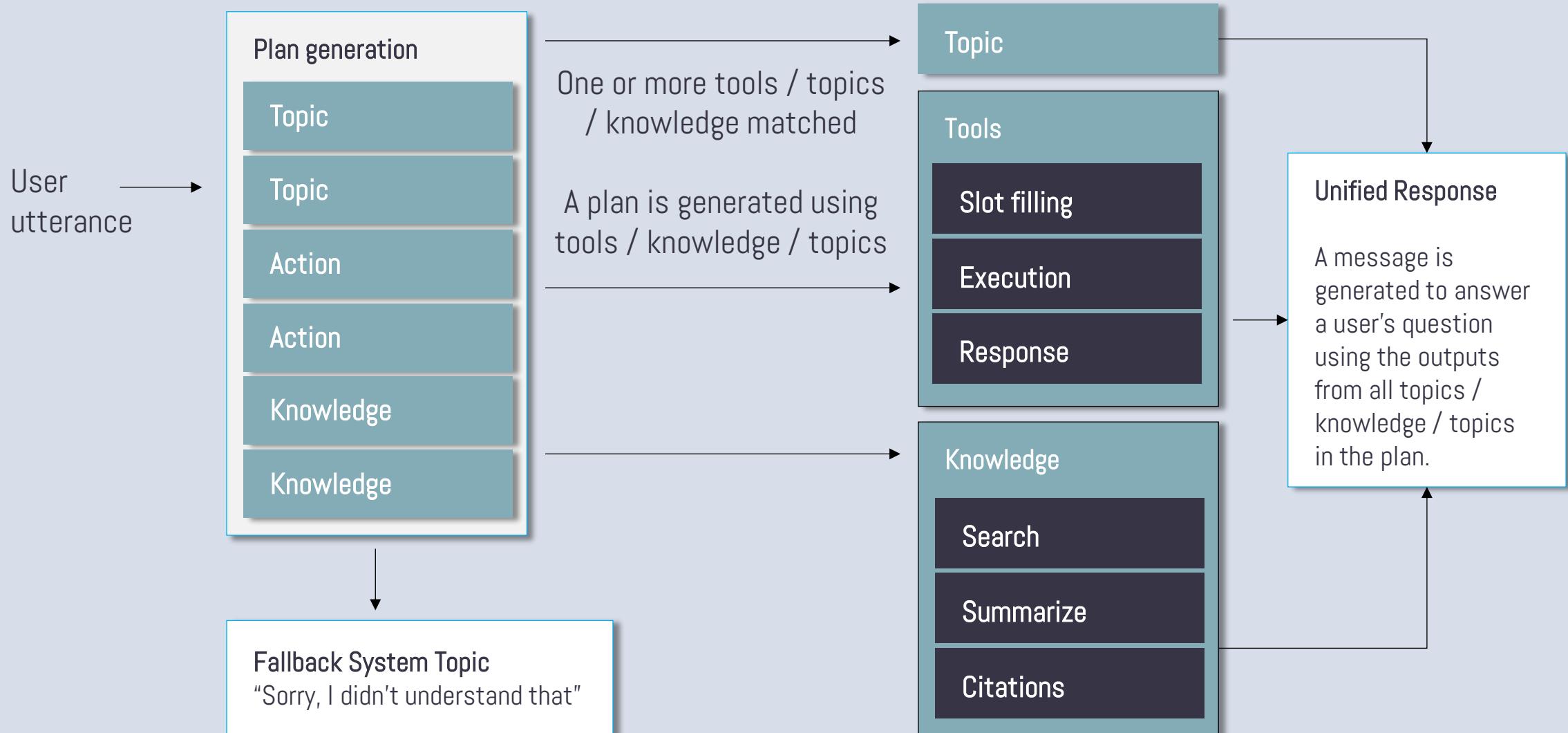
Agents anatomy



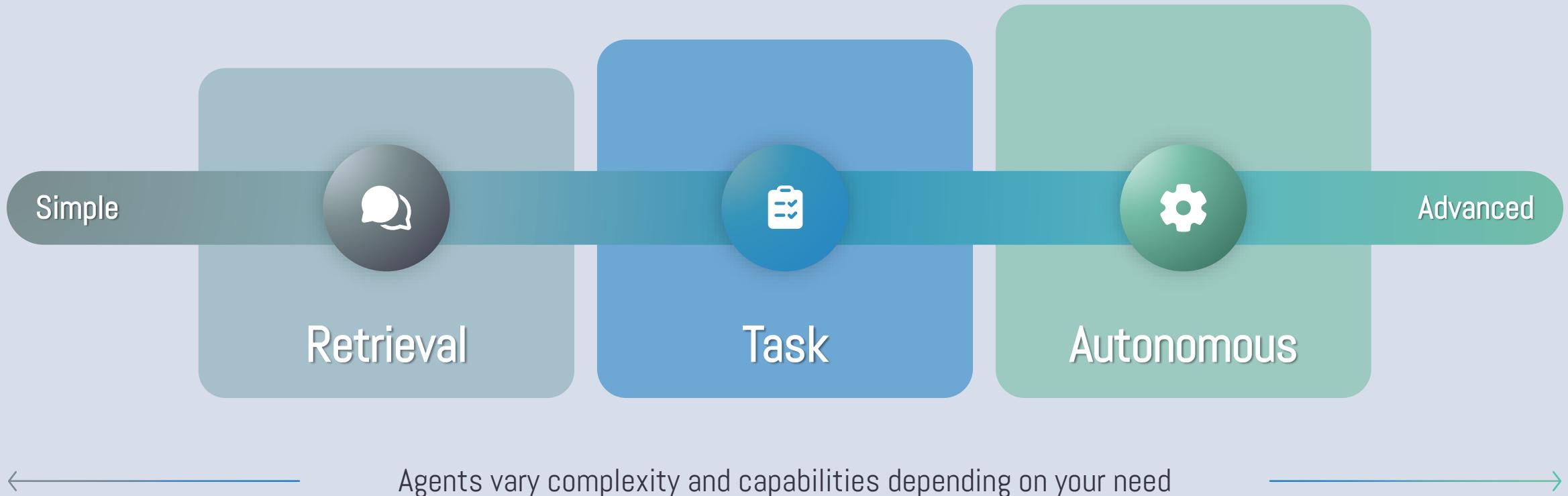
Classic orchestration



Generative orchestration



**Agents are apps that use AI to reason, plan, connect to systems
and complete tasks working alongside or
on behalf of a person, team or organization**





People

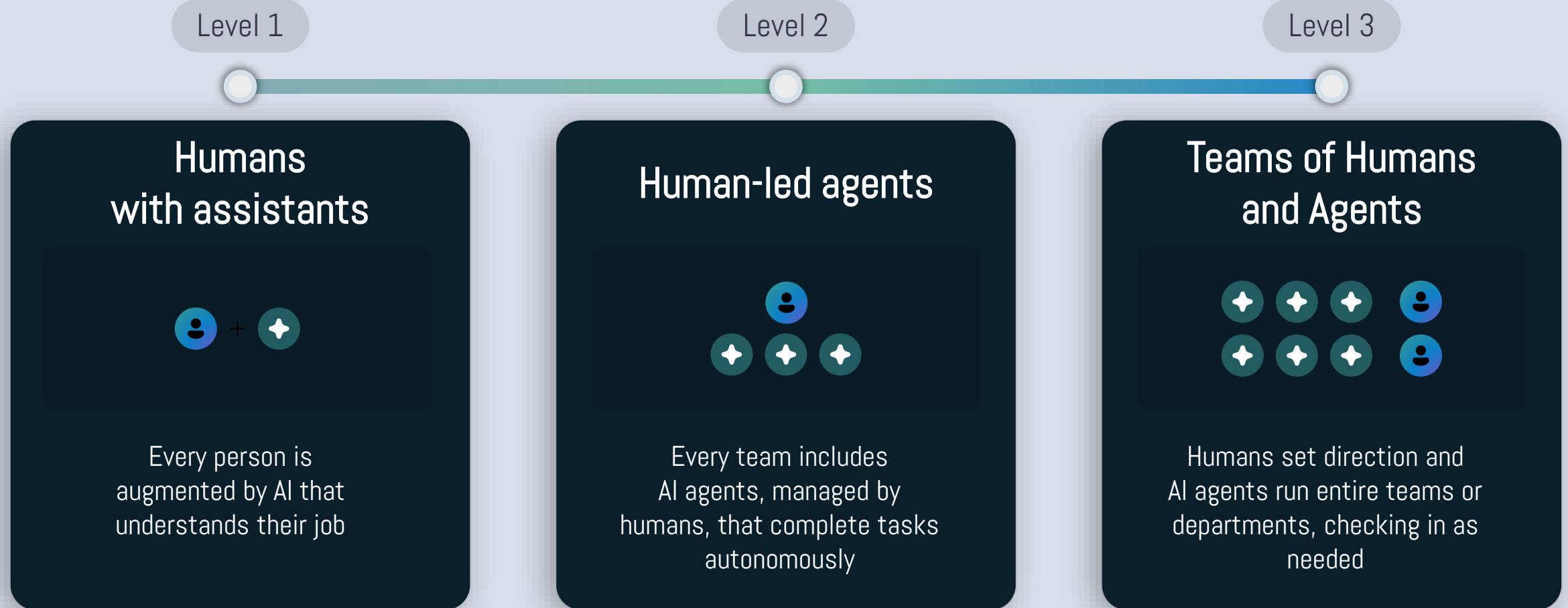


Copilot



Agents

Levels of AI transformation

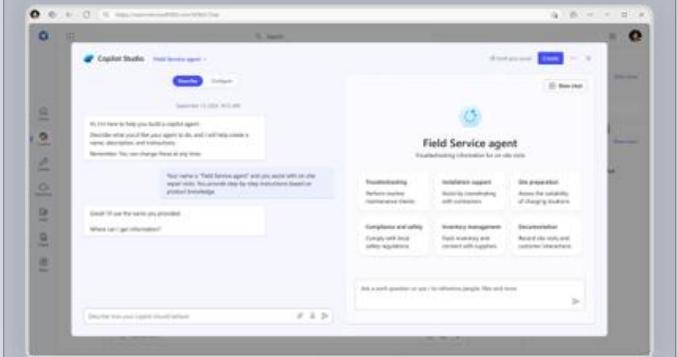


A range of tools for agent creation

No code



For end users

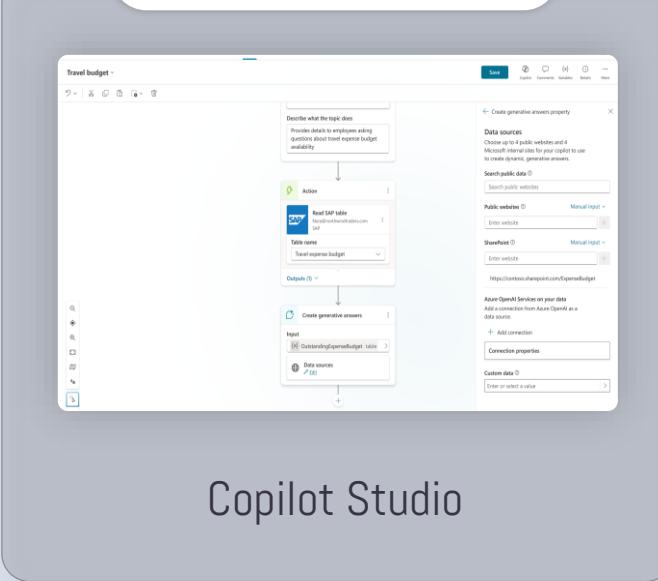


Agent builder

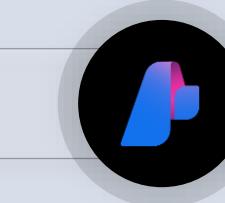
Pro code



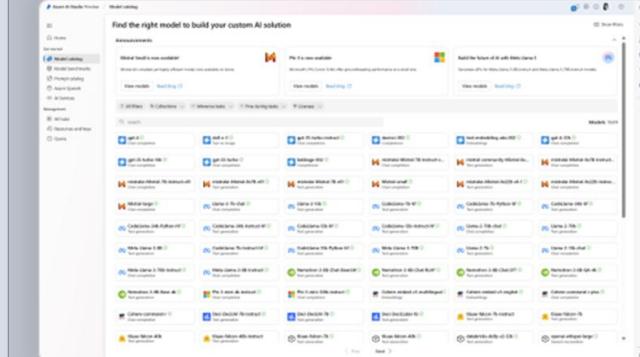
For makers



Copilot Studio



For developers



Copilot Studio, Azure AI Foundry, M365 Agents SDK

Data protection, agent sharing & usage limits, and reporting & cost management

API-based clients

Copilot Studio standard clients

- Standard Web Chat widget
- Power Apps chat control
- Power Pages chat control

Custom clients

- Bot Framework Web Chat
- Custom apps & chat widgets

Server-to-server

- Custom middleware
- Azure AI Bot Service channels (Telegram, WeChat, etc.)
- 3rd-party engagements hubs

Microsoft Teams

Facebook Messenger

WhatsApp⁽²⁰²⁵⁾

Slack⁽²⁰²⁵⁾

Dynamics 365 Contact Center (voice/text)

Microsoft 365 Copilot

Azure AI Bot Service

- Bot Framework bot
- Bot Framework skill



Copilot Studio Architecture

Runtime

Native channels

- Direct Line (HTTP / WebSocket)
- Direct-to-Engine (HTTP / SSE)
- Microsoft Teams
- Facebook
- WhatsApp⁽²⁰²⁵⁾
- Slack⁽²⁰²⁵⁾
- Dynamics 365 Omnichannel
- Microsoft 365 Copilot

Agent as a skill (private preview)

Integrations

HTTP requests

- Power Platform connectors
- Power Automate cloud flows
- AI Builder prompts
- Bot Framework skills

ALM

Power Platform solutions

CI/CD (pipelines/ADO/GitHub)

Dialog management

- Topics
- Nodes
- Actions
- Power Fx
- Voice
- Multilingual

Generative actions

- AI-wrapper for integrations
- Inputs
- Outputs

Security

Web channel security (secret)

- End-user authentication
 - No authentication
 - Native / Custom auth

Power Platform DLP policies

- Authentication settings
- Enabled channels
- Enabled knowledge sources
- Enabled connectors

Microsoft Purview audit logs

VNET / IP firewall⁽²⁰²⁵⁾

Triggers (autonomous agents)

Language understanding

Classic

- Built-in NLU
- Bring your own NLU model

Generative orchestration

Generative answers

Query rewriting

Knowledge search

- Websites
- Custom data
- Files
- SharePoint
- DV Tables
- Graph
- Federated Knowledge
- Azure AI Search

Summarization

- Native
- BYOM⁽²⁰²⁵⁾

AI general knowledge

Standard analytics

Technical telemetry

Conversation transcripts

Azure AI Language

- Conversational Language Understanding (CLU)

Microsoft 365 Graph

- Enhanced search results
- Graph connectors

Azure AI Search

- Vectorized search indexes

Azure AI Foundry

- LLMs, SLMs, Fine-tuned models

Azure Monitor

- Application Insights

Azure Storage

- Data lake

Azure Synapse Analytics

- Workspace

Microsoft Entra ID

- App registration



NO SILVER BULLET.

INTELLIGENT AGENTS
DEMAND INTELLIGENT CHOICE.

Lab time

Check prerequisites

Create first agent with knowledge

Add tool, trigger, topic

INSPIRE

A Framework for Successful Implementations

- Microsoft Cloud Adoption Framework (CAF)
- Power Platform Well-Architected Framework
- Azure Well-Architected Framework
- Power Platform ALM Guidance
- Microsoft Responsible AI Standard
- Administering and Governance Agents
- Copilot Studio Governance and security Guide





nordic. summit

Game time: **Security Survivor**

Microsoft Copilot Studio and Azure = Better together

Bring your own model

Generate responses or run specific tasks using your own standard or fine-tuned models from Azure AI Foundry.

Bring your own index

Vectorize content in Azure AI Search and surface the content for your agents as standard knowledge sources.

Bring your own natural language understanding model

Train your own models for intent recognition and entity extraction

Bring your own CI/CD pipeline

Configure pipelines in Azure DevOps to automatically deploy and source-control your agents

Bring your own AI tools and data with Model Context Protocol

Create next-generation AI tools and data sources that can be consumed from agents through the MCP protocol

Monitor your agents

Stream technical telemetry for standard and custom events and integrations into Azure Application Insights.



Bring your own data lake

Move conversation transcripts to a lake for long-term storage and usage and custom analytics.

Bring your own agent with Agent2Agent (A2A) and more

Use the Microsoft 365 Agents SDK, the Azure AI Bot service, any compatible A2A agents.

Isolate your agents and APIs

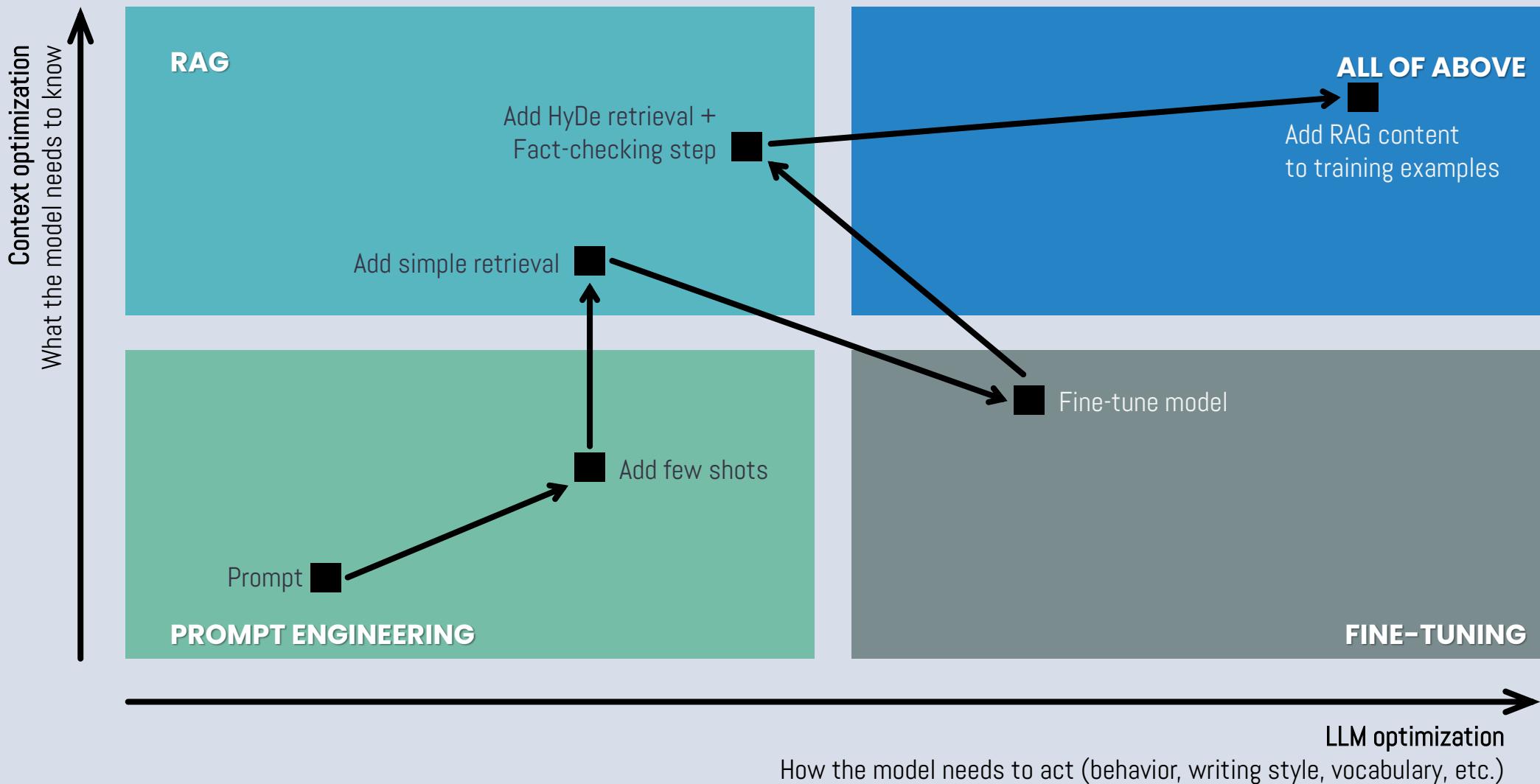
Isolate your agents with subnet delegation into your virtual networks for outbound connectivity, and setup IP firewalls and continuous access evaluation for inbound.

Bring your WhatsApp and voice channels

From Azure Communication Services and with Dynamics 365 Contact Center for a voice telephony channel (IVR scenarios)



LLM accuracy improvement



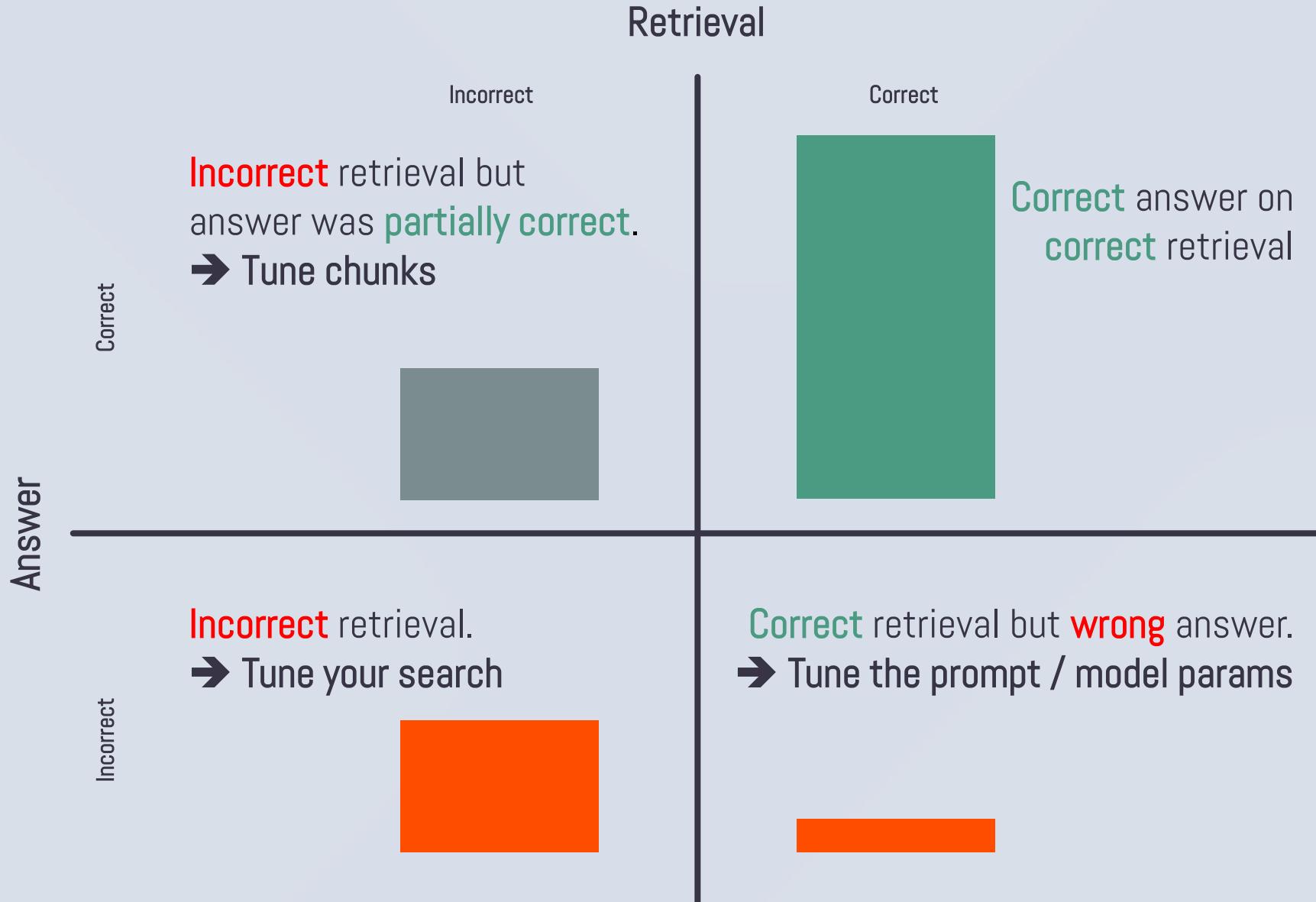
THE PROCESS OF RETRIEVING CONTENT
TO AUGMENT YOUR LLM'S PROMPT
BEFORE GENERATING AN ANSWER

RAG helps AI provide accurate answers based on real data.

- 1** Search  – AI looks through knowledge sources (indexes) using an optimized query.
- 2** Retrieve  – AI fetches the most relevant text snippets.
- 3** Summarize  – AI generates a fact-based response with citations.

What RAG Does NOT do:

-  Not for deep document analysis like:
- Comparing two long documents
 - Checking contract compliance against policies
-  Instead, it retrieves and summarizes data, keeping responses grounded in facts!





nordic. summit

Game time: **RAG Reality Check**

Lab time

Deploy Azure resources

Configure Azure AI Search

Integrate index into Copilot Studio

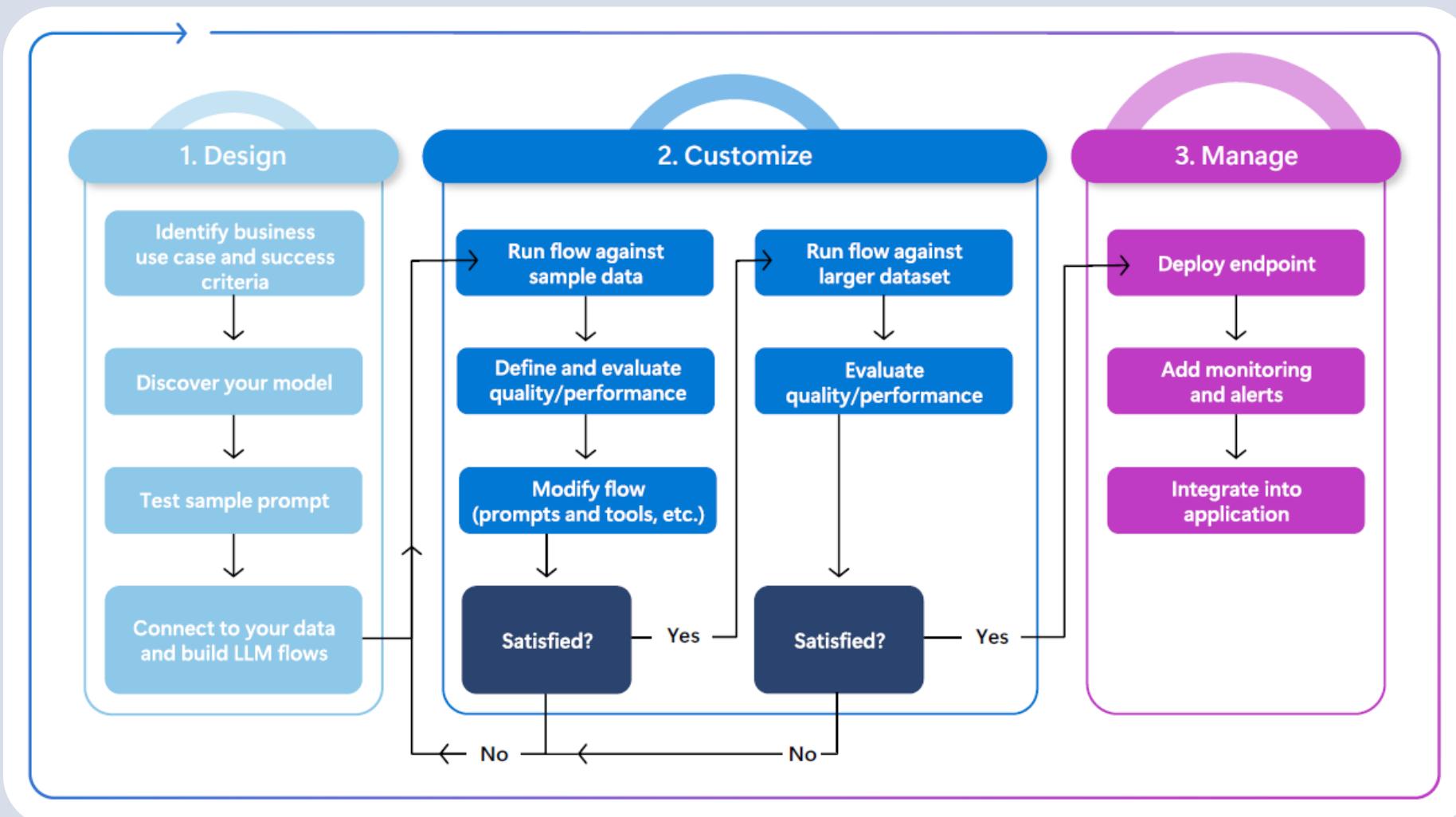
HOW DO YOU TYPICALLY TEST
IF A MODEL OR APPLICATION
IS WORKING AS INTENDED?

At least 30% of generative AI (GenAI) projects will be abandoned after proof of concept by the end of 2025, due to poor data quality, inadequate risk controls, escalating costs or unclear business value, according to Gartner, Inc.



<https://qrco.de/gartner-article>

Evaluation loop



The Copilot Studio Kit is a comprehensive set of capabilities built for [Microsoft Copilot Studio](#). The kit includes features such as

 **Conversation KPIs** – Gain deeper insights into long-term agent performance with structured analytics.

 **Test Automation** – Batch test custom agents with multiple validation methods.

 **Agent Inventory** – Get tenant-wide visibility to all the Copilot Studio custom agents in the organization, across environments.

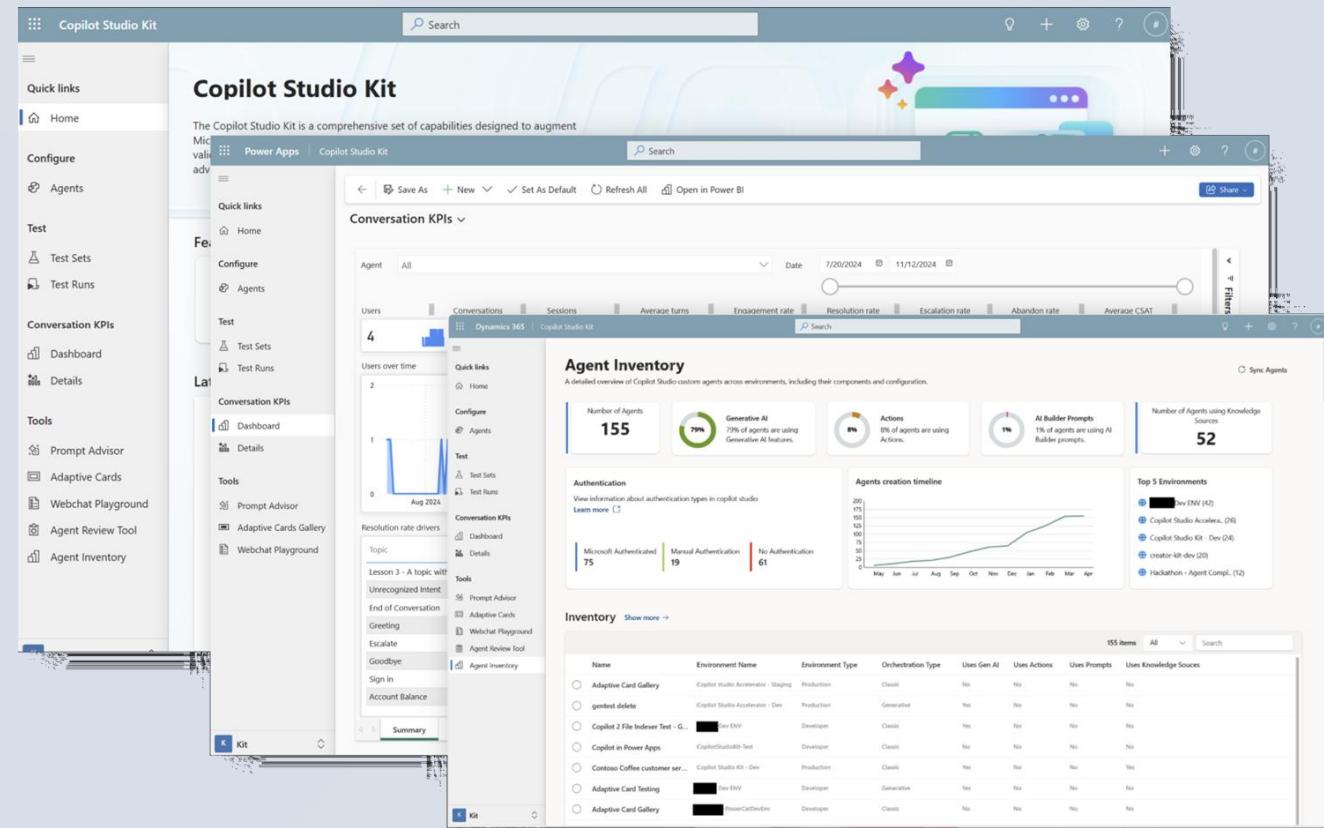
 **Agent Review Tool** - Static analysis of copilot studio agents from solution. Detecting anti-patterns and suggesting mitigation.

 **SharePoint Synchronization** - Selectively synchronize knowledge from a SharePoint site as local knowledge of your custom agent.

 **Webchat Playground** – Customize the look and feel of your webchat with an easy-to-use interface.

 **Adaptive Cards Gallery** – Access a set of pre-built Adaptive Card templates for custom agents

Copilot Studio Kit



The screenshot shows the Microsoft Copilot Studio Kit interface. On the left is a navigation sidebar with 'Copilot Studio Kit' at the top, followed by 'Quick links' (Home, Configure, Agents, Test, Conversation KPIs, Tools), 'Feedback' (Feedback, Report a bug), and 'Copilot Studio' (Agents, Test, Conversation KPIs, Tools). The main area has tabs for 'Power Apps' and 'Copilot Studio Kit'. Below the tabs are sections for 'Conversation KPIs' (Agent: All, Date: 7/20/2024 to 11/12/2024, filters), 'Agent Inventory' (Number of Agents: 155, Generative AI: 79%, Actions: 8%, AI Builder Prompts: 1%), and 'Authentication' (Microsoft Authenticated: 75, Manual Authentication: 19, No Authentication: 61). A 'Agents creation timeline' chart shows activity from May to April. The bottom section is a table titled 'Inventory' with columns for Name, Environment Name, Environment Type, Orchestration Type, and usage metrics (Uses Gen AI, Uses Actions, Uses Prompts, Uses Knowledge Sources). The table lists several adaptive card-related items.

→ <https://aka.ms/DownloadCopilotStudioKit> (AppSource)

→ <https://aka.ms/CopilotStudioKit> (GitHub + Docs)



nordic. summit

Game time: **Eval Showdown**

Lab time

BYOM

Evaluation



nordic summit

www.nordicsummit.info

#NordicSummit

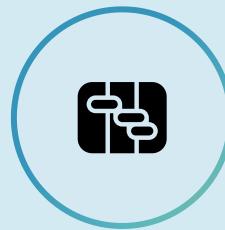
Securing and Governing Agent

Streamline governance at scale



Secure

Built to Stay Safe
Runtime Protection
Compliance and Privacy
Data Protection



Control

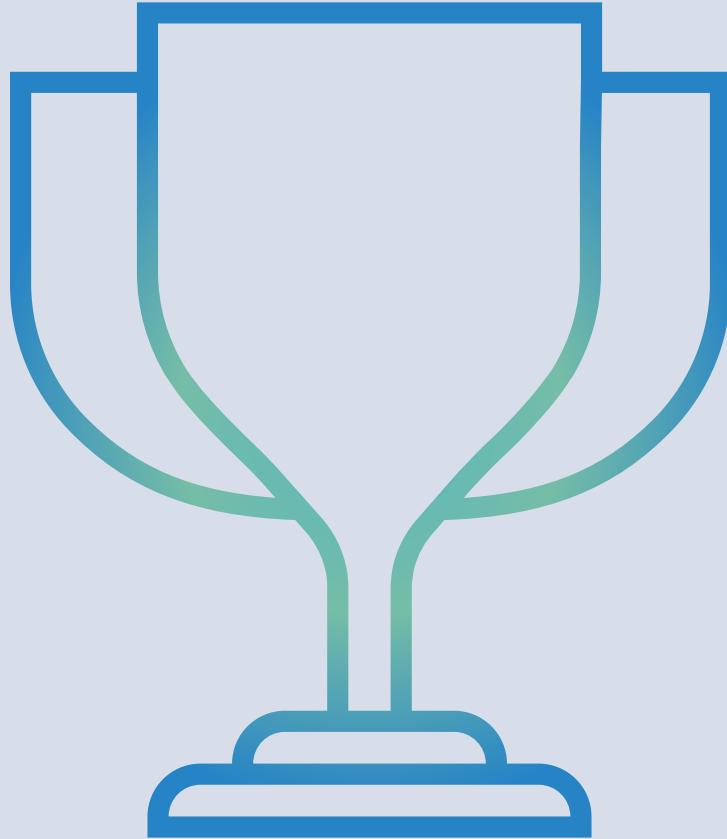
Environment Strategy Maker
onboarding
Certification Workflows
Cost Management



Track & Refine

Readiness and Adoption
Business value & ROI
Zone management
Posture optimization

ALM Golden Rules



- ✓ Work in the context of solutions
- ✓ Create separate solutions only if you need to deploy components independently.
- ✓ Use a custom publisher and prefix.
- ✓ Use environment variables for settings and secrets that change across those.
- ✓ Export and deploy solutions as managed, unless setting up a dev environment.
- ✓ Don't do customizations outside of dev.
- ✓ Consider automating ALM for source control and automated deployments.



nordic.
summit

Q&A



nordic summit

www.nordicsummit.info

#NordicSummit



nordic.
summit

THANK YOU!



nordic summit

www.nordicsummit.info

#NordicSummit