

Microsoft Copilot Studio: a Pandora implementation use case

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Product Manager

Pandora

Chi sono io? Andrea Martorana Tusa

- Product Manager in Pandora. Manager di un team che si occupa di Power BI, Fabric, Power Platform, Copilot, in termini di Governance e Management
- 25+ anni di esperienza nel mondo dati
- Ex Microsoft MVP 2018-2024
- Speaker da molti anni in molti differenti eventi in giro per l'Europa



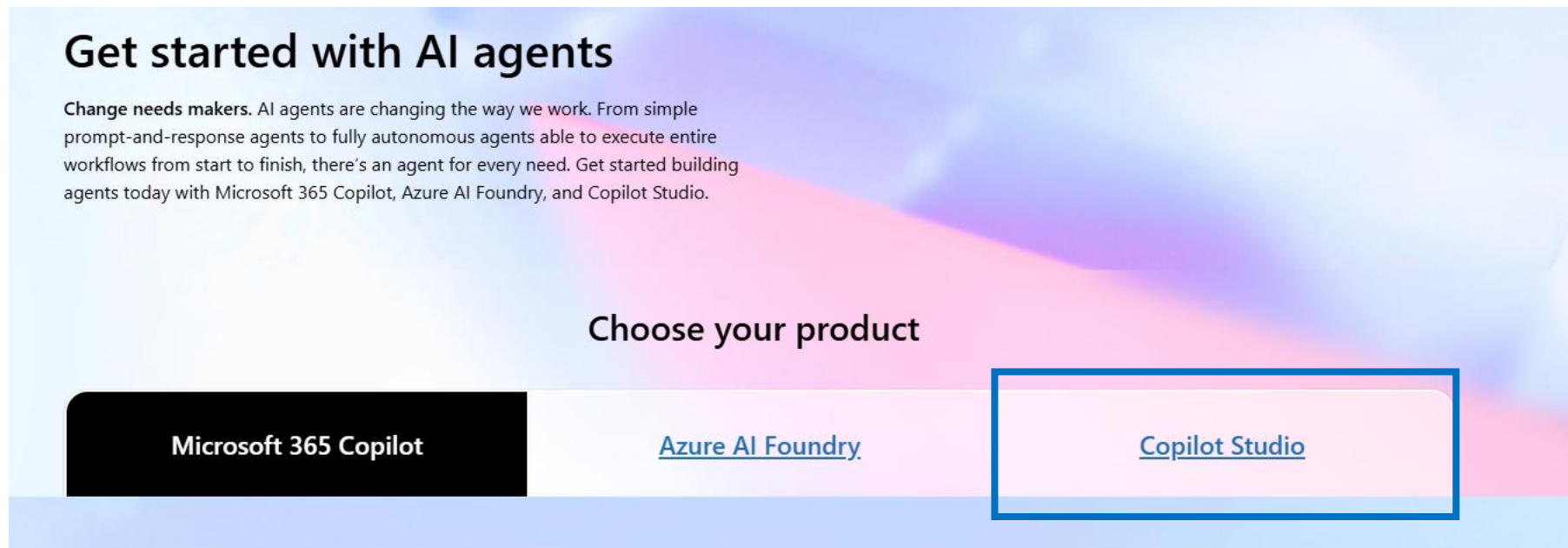
Agenda

1. The use case and Copilot Studio
2. User-centric design
3. Prompting and knowledge sources
4. SharePoint integration
5. Governance
6. Costs
7. Monitoring
8. Findings and conclusions

The use case and Copilot Studio

Which Copilot?

In Pandora we are running a few use cases, testing Copilot Studio Agent for future large-scale adoption



Get started with AI agents

Change needs makers. AI agents are changing the way we work. From simple prompt-and-response agents to fully autonomous agents able to execute entire workflows from start to finish, there's an agent for every need. Get started building agents today with Microsoft 365 Copilot, Azure AI Foundry, and Copilot Studio.

Choose your product

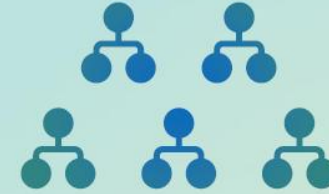
Microsoft 365 Copilot [Azure AI Foundry](#) [Copilot Studio](#)

Agents vs Copilot



Copilot

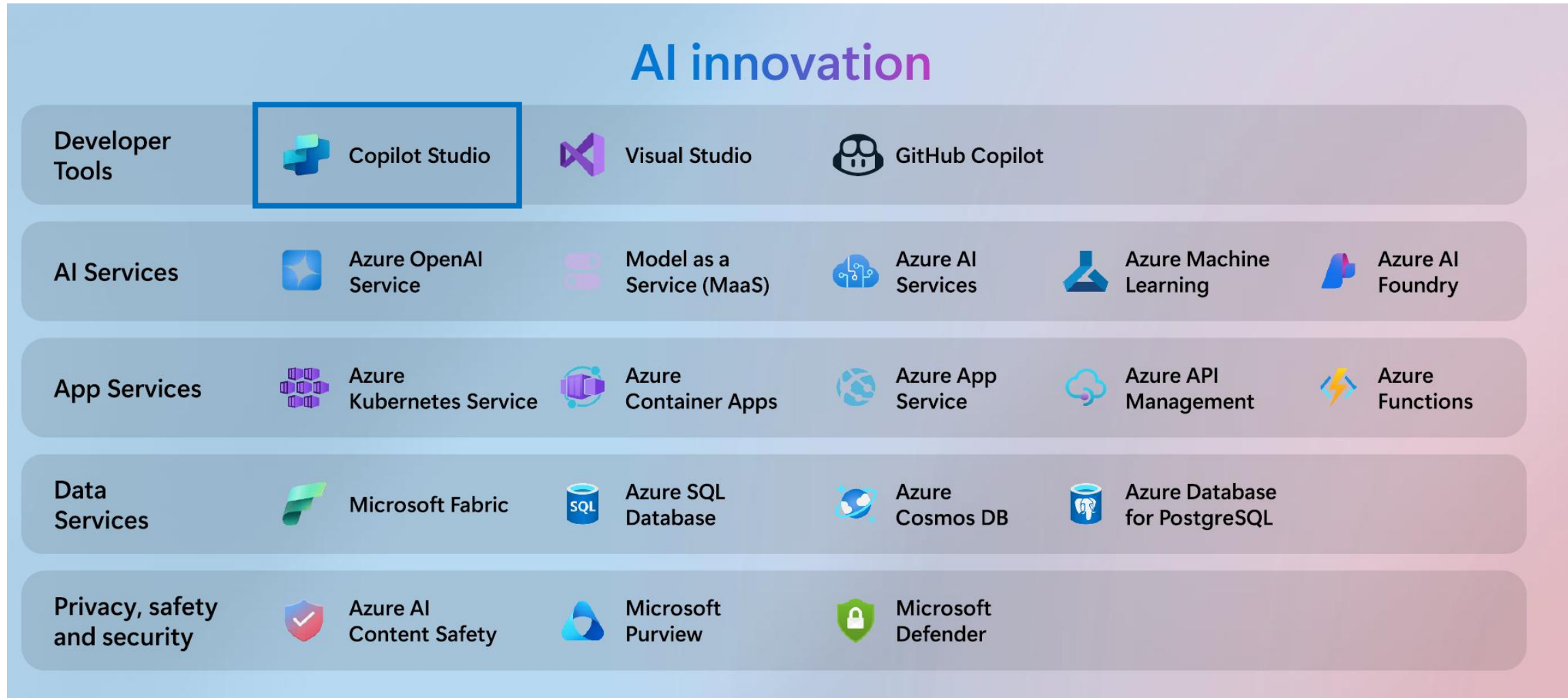
Every employee
has a Copilot



Agents

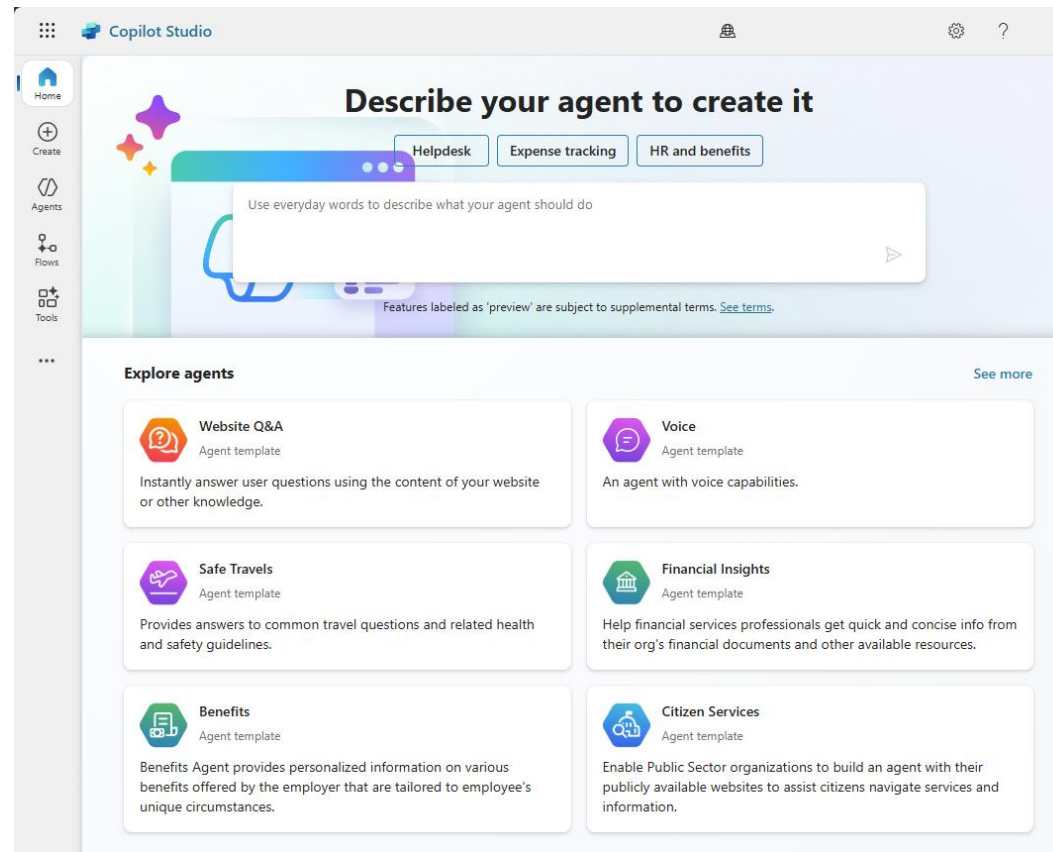
Every business process
transformed by agents

Microsoft Copilot Studio



Microsoft Copilot Studio

“Copilot Studio is a graphical, low-code tool for building agents and agent flows”

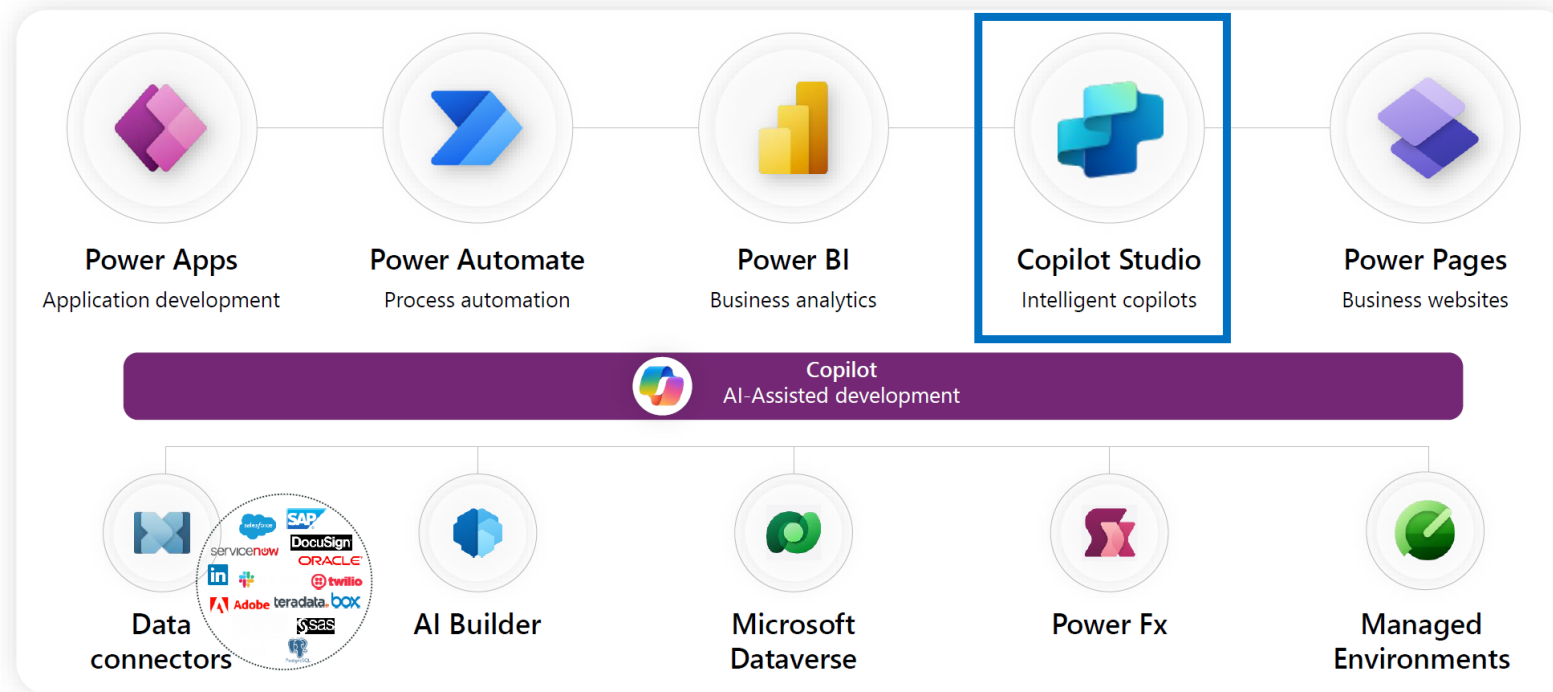


Microsoft Copilot Studio

Very important to mention that Copilot Studio is a component of the Power Platform

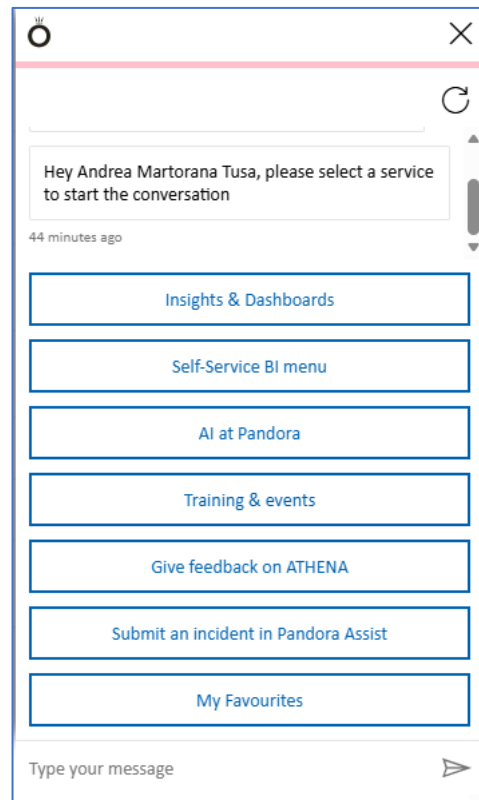
Microsoft Power Platform

Comprehensive platform to build solutions for business problems in fast and collaborative way

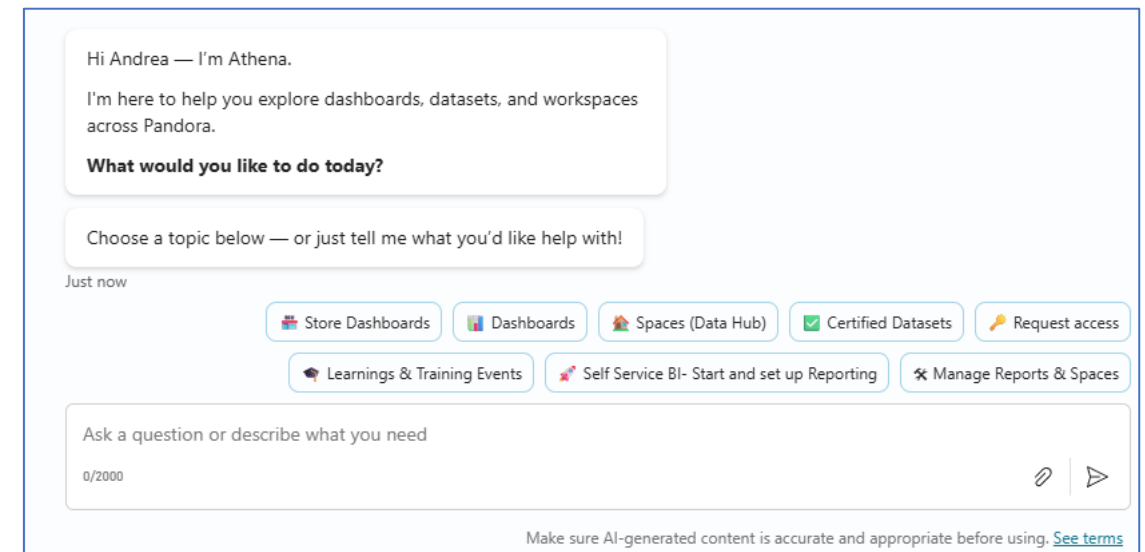


Our use case

From a “stupid” Azure Chatbot



... to a “smart” conversational agent in Copilot Studio



Goals

1

Replace the old Athena bot with Athena Copilot

2

Support users across domains to find reports, datasets, and insights faster.

3

Reduce friction in onboarding, navigation, and content discovery.

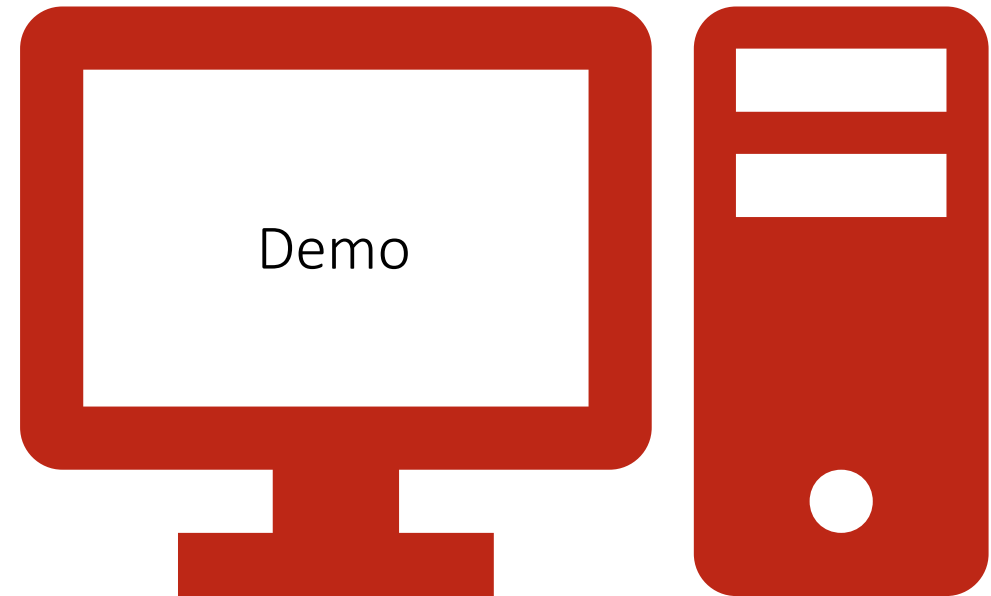
4

Strengthen self-service BI adoption

5

Showcase how AI improves usability and engagement across Athena.

Athena Azure chatbot in Sharepoint



The background of the slide features a dark blue gradient. In the bottom-left and bottom-right corners, there are dense, swirling patterns of small, bright purple and pink dots, resembling a nebula or a digital particle effect. These patterns create a sense of movement and depth, framing the central text.

User-centric design

User centric design






Research-Based Approach

Chat flow analysis · User personas · Feedback from domain users







Three User Groups

-  **Data Consumers** – Find dashboards & KPIs (e.g., Store Managers)
-  **Data Providers** – Use certified datasets & publishing flow
-  **Admins / Owners** – Track usage, adoption & certification



Design Principles

-  Natural language simplicity
-  Context-aware routing (Domain · SSBI · Dataset)
-  Progressive disclosure
-  Seamless SharePoint integration

Prompting and knowledge base

Prompt engineering and patterns

We figured out the essential setting to get a meaningful outcome from the generative AI was to build a prompt contextualized to our patterns.

Findings



1. Prompt Engineering Guidelines

- Prompts should be **contextualized to ATHENA's function**: insights, reports, knowledge base, and service interactions.
- Use **structured prompt templates** to guide the model:
 - "You are ATHENA, an intelligent assistant for Pandora's analytics. When asked, provide report insights, KPIs, or data guidance in simple language."
- Ensure prompts include:
 - Report or domain context
 - Action verbs (e.g., "summarize," "compare," "highlight anomalies")
 - Output format (e.g., chart, summary, insight, explanation)

[ATHENA LLM Agents – Prompting & Generative AI Findings - Athena - Confluence](#)

Prompt engineering and patterns



3. End-to-End Conversation Flow (Loop Model)

- ➔ • **Start Node:** Welcome + Prompt Example
→ "Hi! I'm ATHENA. I can help you with analytics insights, report summaries, or finding store performance. Ask me something like: 'How did NSW stores perform last month?'"
- ➔ • **Processing Node:** LLM interprets and retrieves insight
→ NLP maps question to insight (via Azure Language Service or QnA)
- ➔ • **Response Node:** Rendered insight or visual
→ Output can be tabular, textual, or link to Power BI component
- ➔ • **Loop / Follow-up Suggestions:**
→ "Would you like to explore another region or metric?"
- ➔ • **End Node:** Optional exit
→ "Thanks! If you need more insights, just say 'ATHENA help'."

[ATHENA LLM Agents – Prompting & Generative AI Findings - Athena - Confluence](#)

Knowledge source definition



CENTRALISED KB ON
SHAREPOINT



COGNITIVE SERVICES-
AI SEARCH USING
VECTOR EMBEDDING



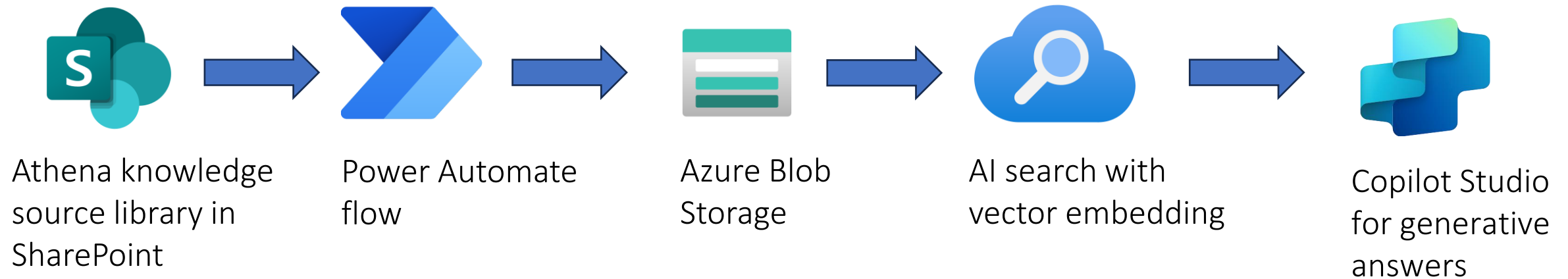
AI SEARCH WITH
PROMPT ENGINEERING



TOPIC DEFINITION

[ATHENA LLM Agents – Prompting & Generative AI Findings - Athena - Confluence](#)

Data source workflow

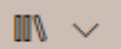








Athena knowledge base



The Athena knowledge base is stored in a SharePoint list classified by topic. We are using a lot of tags to contextualize each topic and build the expected user journey

AthenaKnowledgeBase



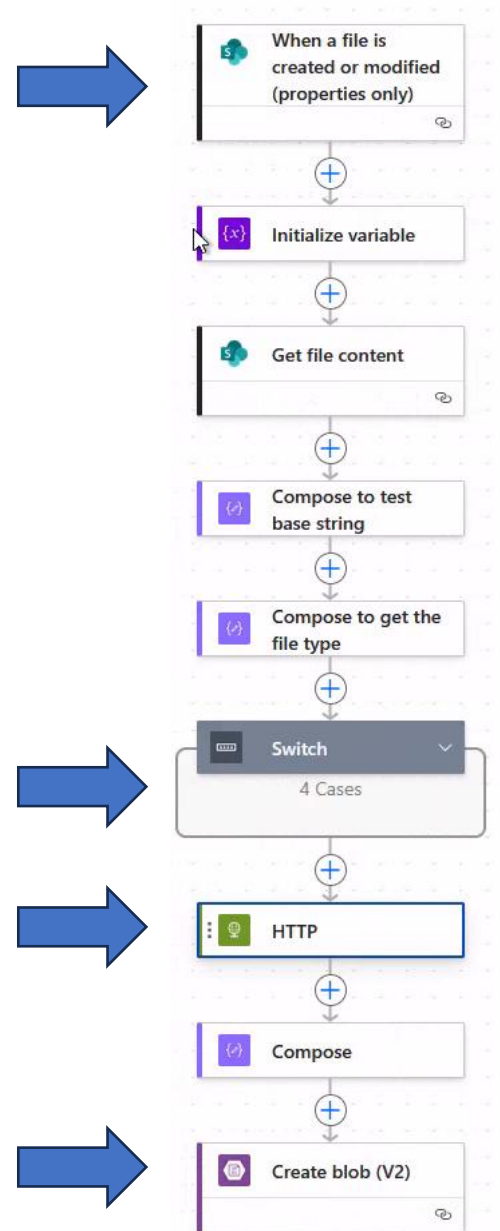
 Name ▾	Modified ⓘ ▾	Content Owner ▾	Modified By ▾	ModuleTag ▾
 AI	July 24		Monika Gupta	
 Incident	November 5		Elnaz Moradi	Incident
 Insights	November 5		Elnaz Moradi	Insights
 Self-Service	November 5		Elnaz Moradi	Self-Service
 Training	November 5		Elnaz Moradi	Training



Power Automate



- From SharePoint list to blob storage
- Convert all documents in JSON



2025 WPC

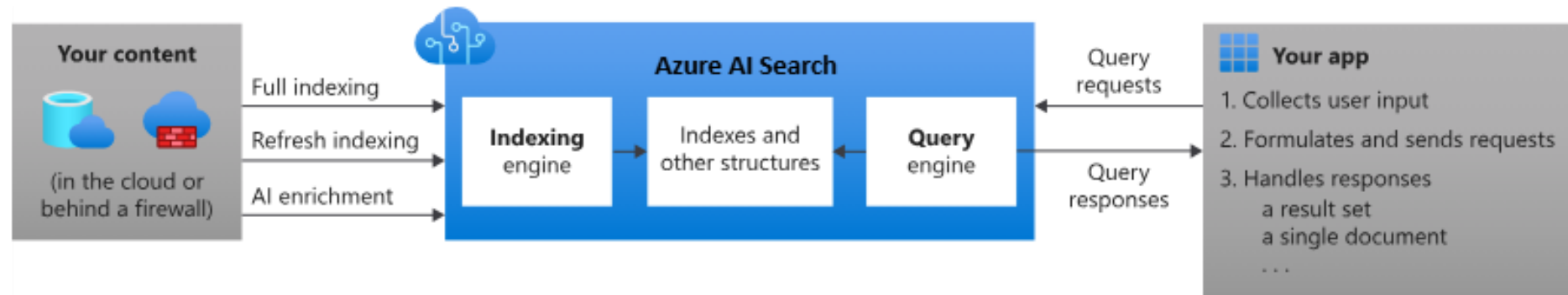
- Before
- After

[illegible]

Azure AI search service



“Azure AI Search is a scalable search infrastructure that indexes heterogeneous content and enables retrieval through APIs, applications, and AI agents”



On the indexing side, if your content is on Azure, you can use indexers and skillsets for automated and AI-enriched indexing. Or, create a logic app workflow for equivalent automation over an even broader set of supported data sources.

<https://learn.microsoft.com/en-us/azure/search/search-what-is-azure-search>

Azure AI search service



Data sources and indexing

Home > athena-bot-qna-dev

athena-bot-qna-dev | Data sources ☆ ...

Search service

Search + Add data source Refresh Delete

Filter by name...

Name Type

athena-kb-datasource Azure Blob Storage

athena-kb-index

Save Discard Refresh Create demo app Edit JSON Delete Encryption

Documents: 27 Total storage: 440.77 KB Vector index quota usage: 0 Bytes Max storage: 160 GB

Search explorer Fields CORS Scoring profiles Semantic configurations Vector profiles

+ Add field + Add subfield Delete Autocomplete settings

Search field names

Field name	Type	Retrievable	Filterable	Sortable	Facetable	Searchable	Analyzer	Dimension
fileName	String	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Standa...	
title	String	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Standa...	
moduleTag	String	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Standa...	
lastModified	DateTimeOffset	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Standa...	
content	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Standa...	
contentVector	SingleCollection	<input type="checkbox"/>				<input checked="" type="checkbox"/>		1536

<https://learn.microsoft.com/en-us/azure/search/vector-search-overview>

Azure AI search service



athena-kb-index ...

Save Discard Refresh Create demo app Edit JSON Delete Encryption

Documents 27 Total storage 440.77 KB Vector index quota usage 0 Bytes Max storage 160 GB

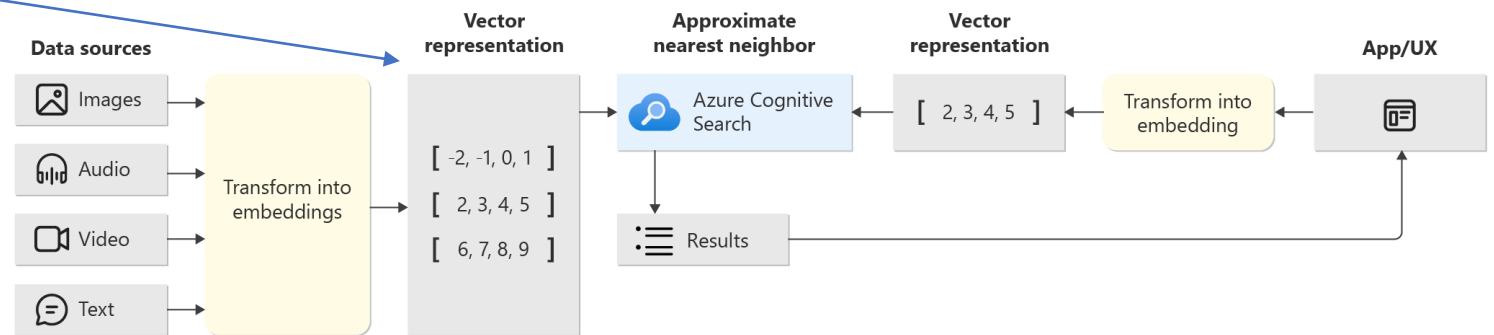
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content	String	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Standa...	
contentVector	SingleCollection	<input type="checkbox"/>				<input checked="" type="checkbox"/>		1536

Search services using indexes and vectors







<https://learn.microsoft.com/en-us/azure/search/vector-search-overview>

Agent's knowledge source



 **ATHENA-BOT**  Overview **Knowledge** Tools Agents Topics Activity Evaluation Analytics Channels


[+ Add knowledge](#)

[All](#) [Azure AI Search](#)

Name	Type	Available to	Usage	Last modified	Status
 ATHENA-BOT - Azure AI Search	 Azure AI Search	 ATHENA-BOT	General	ATHENA Team Service Accoun...	 Error

Topics definition

 **ATHENA-BOT**  Overview Knowledge Tools Agents **Topics** Activity Analytics Channels

 Add a topic

















































Search custom topics

All

Custom (12)

System (9)

Last refreshed now

Name	Type	Trigger	Last modified	Editing	Errors	Enabled
 Find and Explore	 Topic	 By agent	ATHENA Team Service Account 20 days ago			 On
 Goodbye	 Topic	 By agent	ATHENA Team Service Account 3 months ago			 On
 Greeting	 Topic	 By agent	ATHENA Team Service Account 2 months ago			 On
 Insights	 Topic	 By agent	ATHENA Team Service Account 6 days ago			 On
 Learning & Training Events	 Topic	 By agent	ATHENA Team Service Account 6 days ago			 On
 Most Popular	 Topic	 By agent	ATHENA Team Service Account 3 months ago			 On
 Request Access	 Topic	 By agent	ATHENA Team Service Account 2 months ago			 On
 Self-service	 Topic	 By agent	ATHENA Team Service Account 1 month ago			 On
 Start and Setup Reporting (SSBI)	 Topic	 By agent	ATHENA Team Service Account 2 months ago			 On
 Start menu	 Topic	 By agent	ATHENA Team Service Account 5 days ago			 On
 Start Over	 Topic	 By agent	ATHENA Team Service Account 3 months ago			 On
 Thank you	 Topic	 By agent	ATHENA Team Service Account 3 months ago			 On

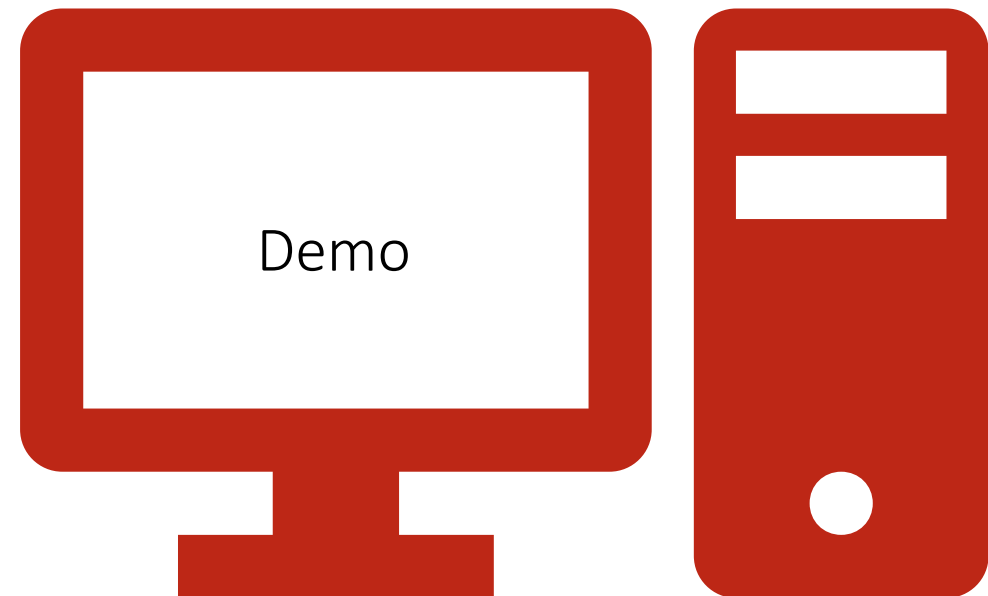
Knowledge, prompting, topics and tagging

[ATHENA - AthenaKnowledgeBase - All Documents](#)

[OSWEU1-EDWD-ATHENA-001-RG - Microsoft Azure](#)

[Overview - ATHENA-BOT | Microsoft Copilot Studio](#)

[ATHENA LLM Agents – Prompting & Generative AI Findings - Athena - Confluence](#)



SharePoint integration

SharePoint integration

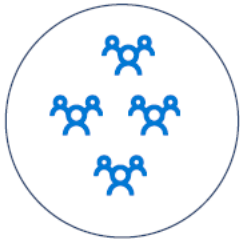
- **SSO** (Single Sign-On) allows users to authenticate once for multiple Microsoft 365 services, using Azure Active Directory (AAD) for identity management.
- In **SharePoint**, users access the site with the embedded **Copilot Agent**, which receives a secure AAD token to access data, personalize responses, and maintain session context.
- Key setup steps are registering the Copilot Agent in Azure AD, enabling SSO in Copilot Studio, configuring SharePoint permissions, and using data-suggested-action-layout for UI customization.
- **Benefits** include no repeated logins, secure personalized interactions, and improved user experience in SharePoint

Governance

Delivery models

Centralized

Governance
DevOps
Change Management
Support



Decentralized

Governance
DevOps?



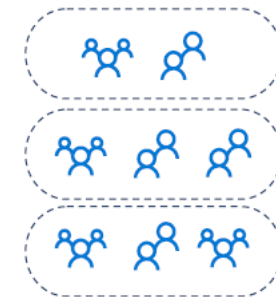
Matrix

Governance
DevOps



BizDevOps

Governance



Delivery model and roles

Centralized

Governance
DevOps
Change Management
Support



AI & Innovation team

- Use cases
- AI Do's and Don'ts
- Risks and Challenges
- Training
- ...

Power Platform admin

Tenant settings

- Set policies on resource usage, access and monitoring
- Control agents creation and sharing
- Monitor usage and adoption
- Set DLP
- Set limit sharing ...

Environments strategy

Manage security

Pandora's minimum setup

2025 WPC

Use case = Developer environment



License management

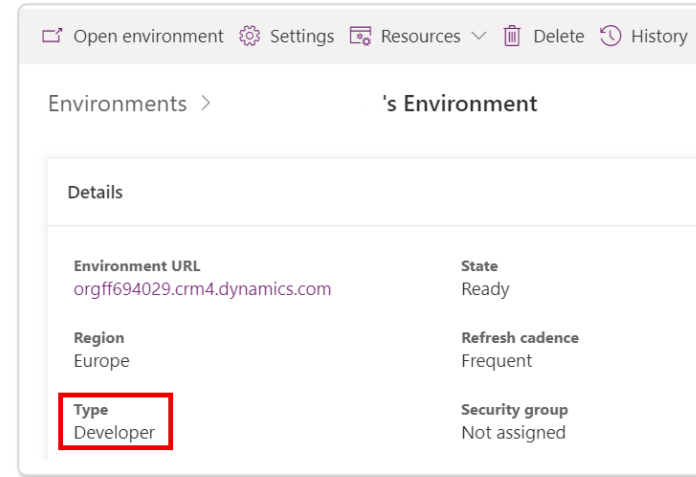
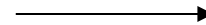
- Copilot Studio User license
- Tenant license

Author permissions

Data Loss Prevention policy

Billing plan

Copilot Studio prepaid message subscription



Entra ID security group

Environment Maker role

Copilot Studio authors group

- Environment group
- Limit sharing
- Capacity enforcement
- Environment rerouting?

To create and manage agents with Copilot Studio, you need:

- A license for each user, also known as a *per user license* (or *Copilot Studio User License* as referred to on the [Microsoft 365 admin center](#)), should be assigned to individual users who need access to create and manage agents.
- A license for your organization, also known as a *tenant license* (or *Copilot Studio* as referred to on the [Microsoft 365 admin center](#)), should be acquired by the tenant administrator. This license can't be assigned to individual users.



Test users



Checklist

What	Where	Who
Developer environment creation	Power Platform Admin Center	PP Admin / Office 365 admin
License management <ul style="list-style-type: none"> • Microsoft 365 Copilot • Tenant license • User license 	M365 admin portal	Office 365 admin
Create Entra ID group	Active Directory	
Environment rerouting and role assignment	Power Platform Admin Center	PP Admin / Office 365 admin
Copilot Studio authors group	Power Platform Admin Center	PP Admin / Office 365 admin
Limit sharing	Environment	PP Admin / Office 365 admin
Capacity enforcement Manage Copilot Studio messages and capacity	Environment	PP Admin / Office 365 admin
Data Loss Prevention policy	Power Platform Admin Center	PP Admin / Office 365 admin
Billing plan		
Copilot Studio prepaid message subscription	Power Platform Admin Center	PP Admin / Office 365 admin

Costs

Licensing

Summary of Copilot Studio	Copilot Studio Pay-as-you-go meter	Copilot Studio Message packs	Copilot Studio use rights with Microsoft 365 Copilot
Plans	RECOMMENDED MOTION Copilot Studio \$0.01 per message	Copilot Studio \$200 per tenant/month	Copilot Studio in Microsoft 365 Copilot Use rights with Microsoft 365 Copilot licenses \$30 per user/month
Included Messages ¹	Pay-as-you-go ²	25,000 Messages ³	Unlimited ⁴
Generative AI	•	•	Limited ⁵
Create and publish your own agents anywhere	•	•	
Create and publish your own agents and plugins to extend Microsoft 365 Copilot			•
The output you create is...	Your own agent	Your own agent	Your own agent ⁶
Power Automate for Copilot Studio cloud flows (Automated, instant, and scheduled flows) within the context of Copilot Studio creations	•	•	•
Standard Power Platform connectors	•	•	•
Premium and custom Power Platform connectors	•	•	•
On premises and cloud services data transfer for Power Platform Connectors	•	•	•
Dataverse for Copilot Studio	• ⁷	• ⁷	
Managed Environments	• ⁸	• ⁸	• ⁸
Available channels to publish your copilot/plugins	External channels (e.g., External Web, FB, WhatsApp etc.) Internal Channels (e.g., Internal Web, Teams, etc.)	External channels (e.g., External Web, FB, WhatsApp etc.) Internal Channels (e.g., Internal Web, Teams, etc.)	Microsoft 365 channels: Microsoft 365 Copilot, Teams, SharePoint

Cost estimator

Copilot Studio agent usage estimator (preview)

Use this estimator to forecast your agent's message volume. Select from licensing options, agent types, and the features your agent leverages to respond to your end users. See the message consumption impact based on these selections. This provides a monthly message estimate for a single agent and makes no guarantees of final costs. This isn't a pricing calculator, so we can't provide total costs or make any definite forecasts around your monthly expenses.

1 Message = \$.01

Go [here](#) to convert to your currency.

Estimator type

Configure monthly agent message estimation in two ways

- ☒ An estimate based on common telemetry data and assumptions
- ☐ An estimate based on manual entries for my agent

Agent traffic

Agent traffic quantifies the activity an agent supports by assessing the number of end users accessing the agent and their monthly engagement frequency

How many users? *

e.g. 1000

On average, how many times per month will your users interact with your agent? *

e.g. 30

Agent type

Agent type specifies whether the agent is deployed internally for employee interactions or externally for customer and partner conversations. Deployment location impacts usage trends, aiding in accurate consumption forecasting. [Learn more](#)

What is your agent type? *

- ☐ Employee-facing agent ☐ Customer or partner-facing agent

Agent orchestration

Orchestration involves managing and coordinating an agent's capabilities and actions to effectively respond to user queries and perform tasks. [Learn more](#)

What type of orchestration will you require? *

- ☐ Generative ☐ Classic

Agent knowledge

Knowledge sources enable agents to provide relevant information and insights. Published agents use configured knowledge sources to ground their responses. [Learn more](#)

Reset

Total estimated messages

Messages driven by knowledge

- Messages consumed for tenant graph grounding (10 messages) + generative answers (2 messages)
- Messages consumed for non-tenant graph grounding (2 messages): Dataverse, web, files

Messages driven by actions and topics

- Number of messages that charge for actions and topics
- Number of messages that charge for agent flows

Messages driven by agent autonomous triggers

Messages driven by optional modifiers

Basic GPT-4o mini

1 message per every 10 responses

Standard GPT-4o

15 messages per every 10 responses

Premium GPT-o1

100 messages per every 10 responses

Cost setup – Power Platform Admin Center

- Azure subscription
- Billing policy
 - Subscription
 - List of environments linked to the azure subscription
- Billing plan
- Manage prepaid capacity

The screenshot shows the 'Billing Plans' section in the Power Platform Admin Center. On the left is a 'Licensing' sidebar with 'Billing Plans' selected. The main area is titled 'Billing plans' and includes a description: 'A pay-as-you-go plan is a group of one or more environments that you can configure to bill to Azure.' Below this is an 'Active' tab and a toolbar with actions: '+ New billing plan', 'Refresh list', 'See details', 'Edit', 'Download report', and 'Delete billing plan'. A table lists the active billing plan.

Name	Status	Azure subscription name	Resource	Products
AllInnovationCopilotStudioBilling	Enabled	AI-Innovation-Copilot-Studio-Billing	AllInnovationCopilotStudioBilling	Dataverse, Copilot Studio, W365

Cost tracking

Power Platform Admin Center

The screenshot displays the 'Licensing' section of the Power Platform Admin Center, specifically the 'Environments' tab. The left sidebar lists various products, with 'Copilot Studio' highlighted. The main content area shows 'Copilot Credits capacity' and 'Sessions capacity' tabs. Below these, the 'Capacity consumption by product' section displays data for the current month. The 'Message consumption details' section includes a table titled 'Message consumption by resource' with columns for Name, Product, Feature, Billed Copilot Credits, and Non-billed Copilot Credits. The table lists four resources: ATHENA-BOT (Agent action), ATHENA-BOT (Classic answer), ATHENA-BOT (Generative answer), and LLM-AI Search Modulewise (Agent flow actions). The Billed Copilot Credits column shows 0 for all resources, while the Non-billed Copilot Credits column shows 15, 16, 2, and 34.19 respectively. A blue box highlights the last two columns of the table.

Licensing

Billing Plans
Capacity add-ons
Products
Power Apps
Power Automate
Power Pages
Copilot Studio
Dataverse
Finance and Operations

Licenses

Summary **Environments**

Manage billing plans Manage Copilot Credits Manage sessions

Copilot Credits capacity Sessions capacity

Capacity consumption by product
Displaying data for current month

	Pre-paid
Copilot Studio	0.00
	Pay-as-you-go
	0.00

Message consumption details

Message consumption by resource

Download Month to date Filter by keyword

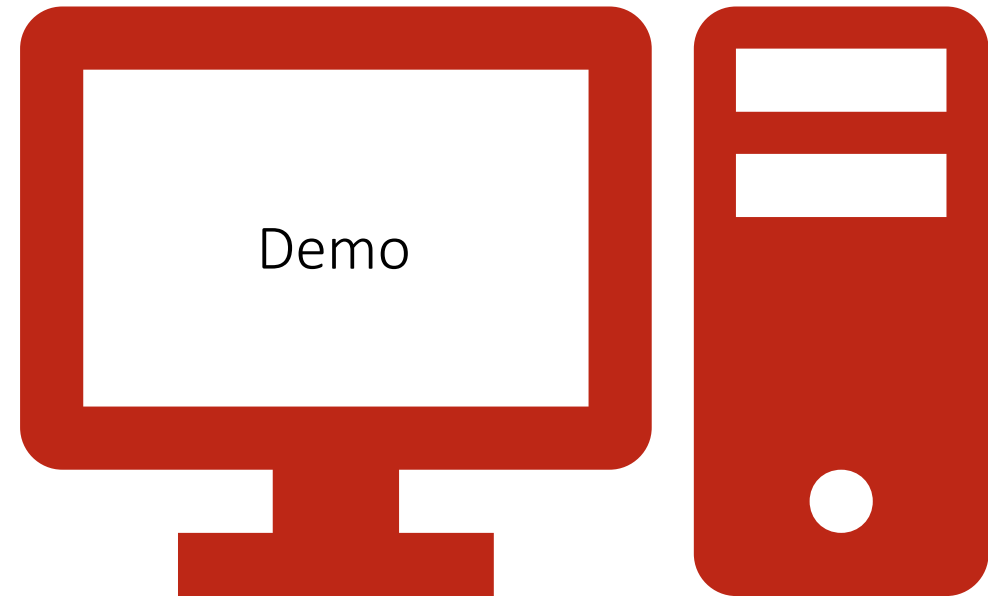
Name ↓	Product	Feature	Billed Copilot Credits	Non-billed Copilot Credits
ATHENA-BOT	Copilot Studio	Agent action	0	15
ATHENA-BOT	Copilot Studio	Classic answer	0	16
ATHENA-BOT	Copilot Studio	Generative answer	0	2
LLM-AI Search Modulewise	Copilot Studio	Agent flow actions	0	34.19

Licensing > Copilot Studio

Power Platform Admin Center

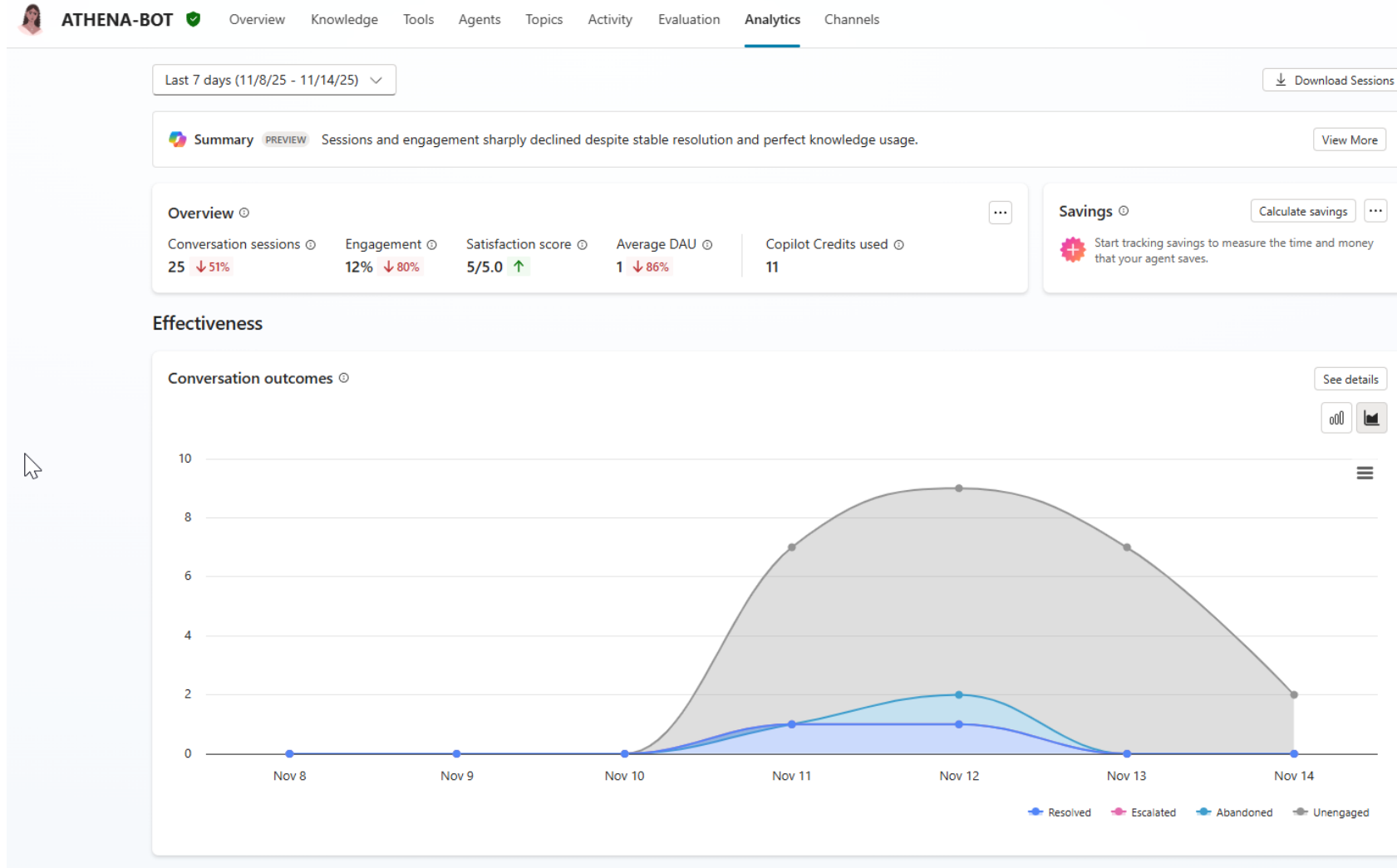
The screenshot shows the Power Platform Admin Center interface. The left sidebar contains navigation links: Home, Actions, Manage, Monitor, Security, Deployment, Licensing (selected), Copilot, and Support. The main content area is titled 'Licensing' and has tabs for 'Summary' and 'Environments'. Under the 'Summary' tab, there is a section for 'Copilot Studio' with buttons for 'Manage billing plans', 'Manage messages', 'Manage sessions', and 'Download report'. Below this is a 'Recommendations' section with a 'Create a billing plan' card. The 'Capacity summary' section shows 'Pay-as-you-go messages' with 1 Billing plan and 0 Total messages. The 'Prepaid capacity' section displays a table of capacity usage.

License type	Category	Purchased	Assigned	Consumed
Capacity Manage capacity	Messages capacity	0	0	0
Capacity (Legacy) Manage capacity	Sessions capacity	0	0	0



Monitoring

Copilot Studio agent's analytics



Power Platform Admin Center

Monitoring interface keeps changing

Monitor

Overview

Alerts

Logs

Products

Power Apps

Power Automate

Copilot Studio

Copilot Studio PREVIEW

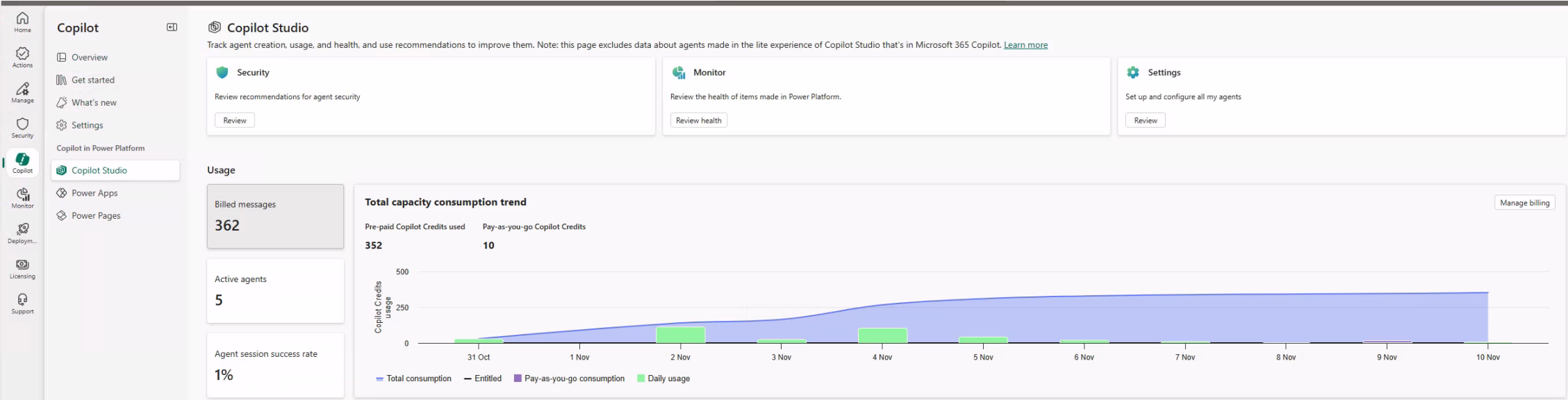
Select an agent to view its operational he

Agent session success rate is under 90% X

Items: 2

Name	Agent s success
ATHENA-BOT	↓ 50.0%
AX Support	→ 0.00%

Copilot Studio tab

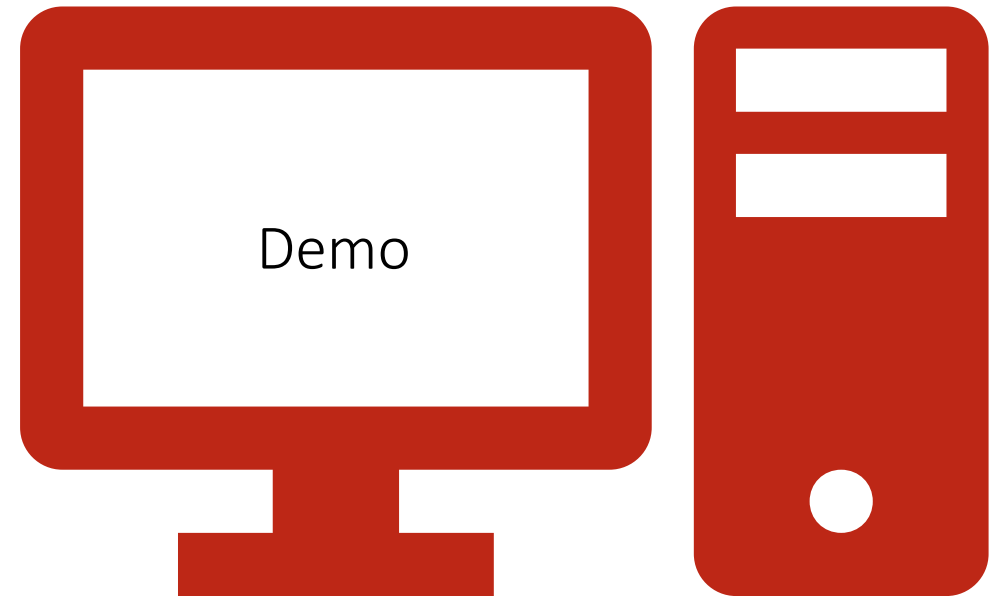


Monitoring

Copilot Studio Agent Analytics

Power Platform Admin Center

Copilot Studio tab in PPAC



Findings and takeaways

The team involved

- UX designer/user researcher
- Azure engineer
- Product Manager
- Power Platform admin
- Data scientist from the AI team
- Microsoft consultants
- ... + several calls and workshops with Microsoft

Findings

- Real teamwork with several skills and roles required
- Consistent metadata (title, moduleTag, lastModified) is vital for accurate AI Search indexing
- Utilize Azure AI Search vector indexing for semantic understanding
- Merge prompt engineering with search grounding to refine bot responses
- Heavy Power Platform management: environments, access and roles, monitoring, tenant settings, billing plans
- Needs automation to manage users and permissions
- Cannot stop publishing on the Default environment. Lot a mess to deal with
- Sharing and publishing not clear. How-to? Best practices?
- Difficult to monitor at-a-glance

Take aways

- Need a team. Is not a one-man show
- Low code / No-code tool? Not true in our case
- Proper prompting is the key
- Immature from many angles (Governance, distribution, monitoring, security, ...)
- Need a Power Platform admin (and skills)
- Missing transparency on costs
- Monitoring is not available yet

<https://github.com/Andrea-Martorana-Tusa/CopilotPandora>



Q&A

Grazie!