The hitchhiker's guide through the jungle of AI agents

David Schneider

Global AI Bootcamp 2025

Barcelona

Spain

"I want AI to do my laundry and dishes so that I can do art and writing, not for AI to do my art and writing so that I can do my laundry and dishes."

Author and videogame enthusiast **Joanna Maciejewska** (although bathroom cleaning goes ah___

David Schneider

- CTO of isolutions, Swiss Microsoft partner
- General Manager of isolutions Barcelona
- background as a SharePoint software developer 👨‍💻
- passionate about technology and generative AI
- Ask me about: 🫕 🏂 🏒

https://linkedin.com/in/david-schneider

AI Agents

Decompose c... ...in addition
sm... ...ts

Specialized age... ...tly of the user
of a specific (small) task ... to fully automate tasks

Can communicate with each other

Act on behalf of a company,
department, or team – not just a
user

*"In the context of copilot,
Microsoft has a broader
understanding of agents."*

What is Microsoft 365 Copilot

- **Personal Assistant** for **Employees** daily work
- Integrates in the Office Apps like Word, Teams, Outlook, PowerPoint, Excel, Loop, OneNote...
- It's very user centric and has access to the information you have access to...
- Uses heavily the Office Graph to «know» about you
- Can be extended with other sources of information
- 30 USD / user & months

What's in for me?

Plan a meeting: Find a timeslot, move around another meeting and book a meeting room.

Update Line of Business systems like CRM, ERP, etc. based on incoming emails.

Book a trip including hotel, flight, etc. directly from Outlook.

Analyzing and proposing a solutions for a ticket or request.

Store receipts that arrive by email automatically in the expense tool.

Incoming messages in Outlook and Teams are analyzed, including prioritization and suggested replies

Where is the difference?

User Interface

Instructions

Responsible AI

Knowledge

Triggers and actions

Automation

Orchestrator

Foundation Models

Two types of agents (in context of M365 Copilot)

Feature	Declarative Agents	Custom Engine Agents
Runtime	Microsoft 365 Copilot, seamlessly integrates into Microsoft 365 apps like Teams, Word, and PowerPoint.	Operates as standalone Teams chatbots or apps with cross-platform capabilities.
Context	Always in the context of the current user	Internal (Authentication with EntraID) or External (B2B or B2C) or Autonomous Agents
Costs & Licensing Requirements	Microsoft 365 Copilot or (in Microsoft 365 Chat) pay per use	Copilot Studio and/or Azure services (subscription and pay per use)

The 4 types of declarative agents

SharePoint Agents	Agent Builder
Copilot Studio	Teams Toolkit for VS Code

Microsoft 365 Copilot

Demo

Declarative Agents

Agent Builder

Demo

Copilot Studio

Copilot Studio

Environment
Default

DS

Home

Create

Agents

Library

Copilot for Microsoft 365   Overview   **Agents**

➕ Add agent

🔍 Search library

Name	Created by	Last modified ↓	Status
🍕 Pizza Waiter (Copilot Studio)	David Schneider	David Schneider 13 days ago	✓ Ready

Declarative Agent based on a REST API

PizzApi `1.0` `OAS 3.0`

http://localhost:5222/swagger/v1/swagger.json

PizzaOrderItems ⌃

GET	/api/PizzaOrderItems ⌄
POST	/api/PizzaOrderItems ⌄
GET	/api/PizzaOrderItems/{id} ⌄
PUT	/api/PizzaOrderItems/{id} ⌄
DELETE	/api/PizzaOrderItems/{id} ⌄

Please order a large pizza margherita for David, no extras

I added a new order for a pizza:

Client: David
Pizza: Margherita
Dimensione: 32 cm (large)
Extra Toppings: no extra

What orders are waiting

These orders are in the queue:

Client: David, **Pizza:** Margherita
Client: Eric, **Pizza**: Proscuitto

Demo

Declarative Agent

Declarative Agents

	SharePoint Agents	Agent Builder	Copilot Studio	Teams Toolkit for VS Code
Use Case	RAG with DocLib	RAG and conversational agents	Complex Logic	Integrate OpenAPIs and conversational agents
Knowledge	SharePoint DocLib	SharePoint, Bing, Graph Connectors, Dataverse, Bing	Files, Dataverse, Power Platform Connectors, Bing, SharePoint	APIs
Orchestration	No	No	No	Different API calls
Distribution	.agents file	ZIP file with manifest	Power Platform solution	Teams App

Custom Engine Agents

Difference to Declarative Agents

User Interface	Teams Bot, Website, B2B, B2C, or autonomous
Instructions	Full flexibility
Responsible AI	Take care about privacy and filters
Knowledge	RAG with Files, Bing Search, Microsoft Graph, Azure AI Search, Microsoft Fabric, etc.
Action	REST API, Power Platform Connectors
Automation	Workflows, Actions, Triggers
Orchestrator	Copilot Studio Topics, Semantic Kernel, Microsoft 365 Agents SDK, etc.
Foundation Models	Every model available in Azure AI Foundry (GPT, Llama, Deepseek, SLM)

Copilot Studio (formerly known as Power Virtual Agents)

Teams Toolkit (aka Teams AI Library)

Microsoft 365 Agents SDK (formerly known as Bot Framework)

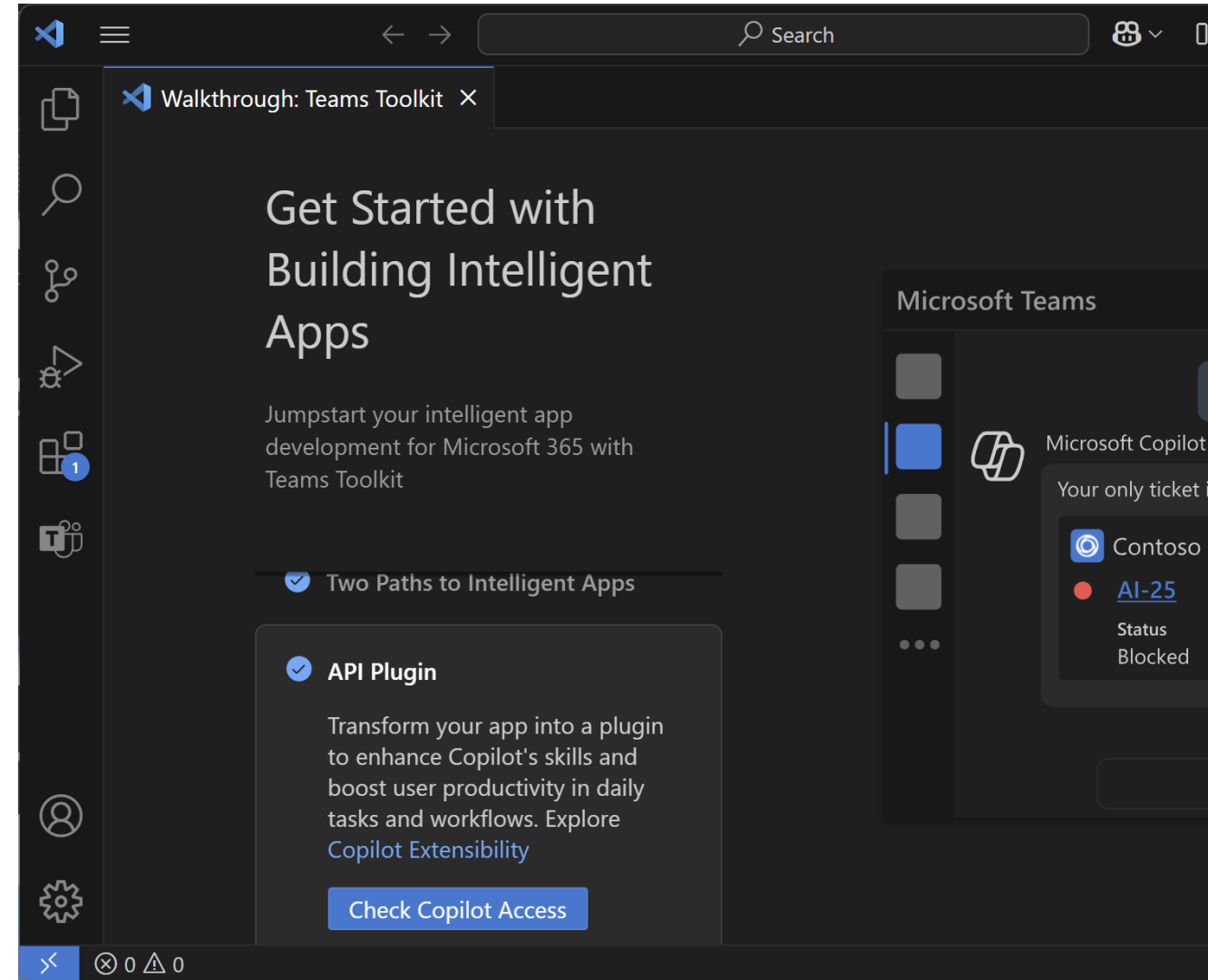Azure AI Foundry with the new Azure AI Agent Service

Custom solution with Semantic Kernel, Autogen or other

Demo

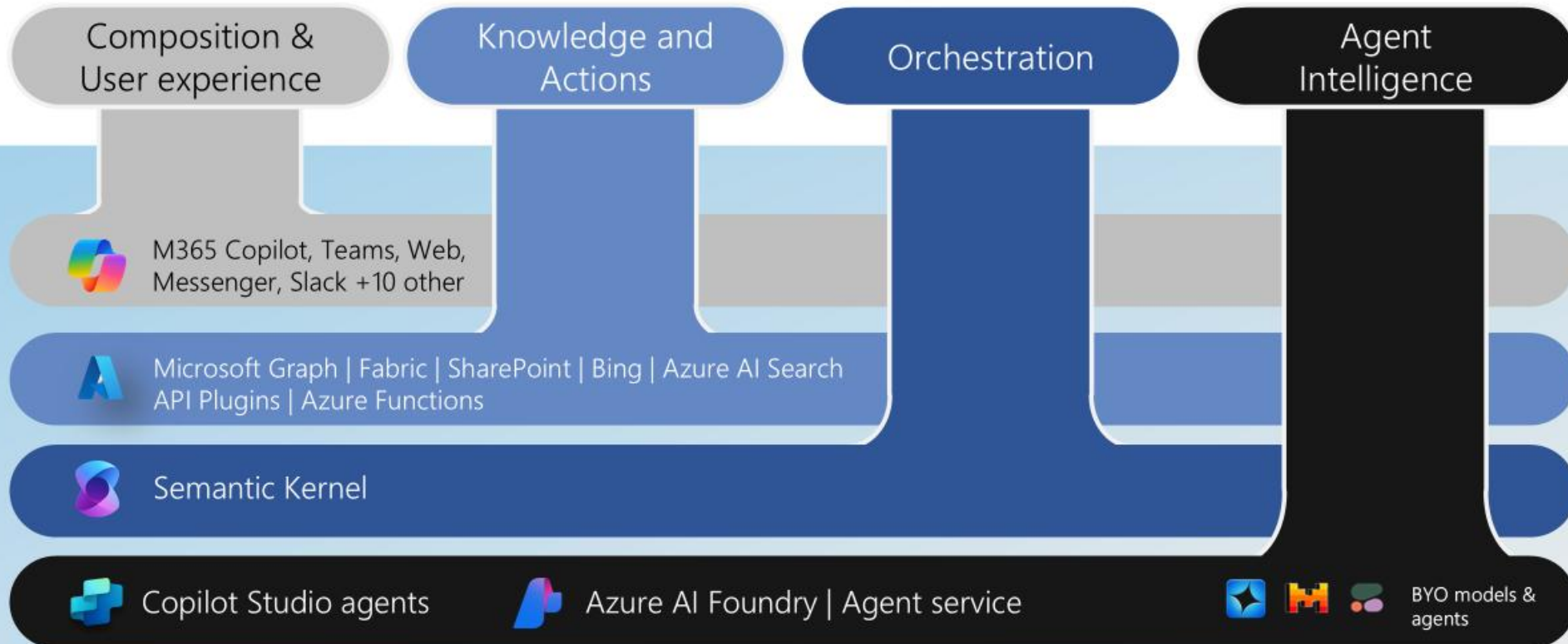Copilot Studio

Teams Toolkit

- Basic AI Chatbot
- Chat with your data
  - Azure AI Search
  - Custom API
  - Microsoft 365 Graph
- AI Agent
  - Build from scratch
  - Build with Assistant API
  - (hopefully more to come)

Azure AI Agent Service

Code First

Use-case-agnostic platform for building, deploying, and managing AI agents as micro-services

Data

Enterprise solution, Bing, SharePoint, Microsoft Fabric, Azure AI Search and other APIs

Models

Azure Open AI (GPT-4.0, GPT-4, GPT-3.5)

3rd party LLM (Llama 2, Mistral-Instruct, Mistral-larger-2027, Cohere Command R+)

Integration

Copilot Studio is becoming more integrated with Azure AI Foundry, enabling more complex and custom scenarios.

Conclusion

| Declarative Agents | | Custom Engine Agents |

Microsoft 365 Copilot

| SharePoint Agents | Agent Builder |
| Copilot Studio | Teams Toolkit for VS Code |

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Thank you