Creating custom Copilots for SharePoint Online with Microsoft Copilot Studio

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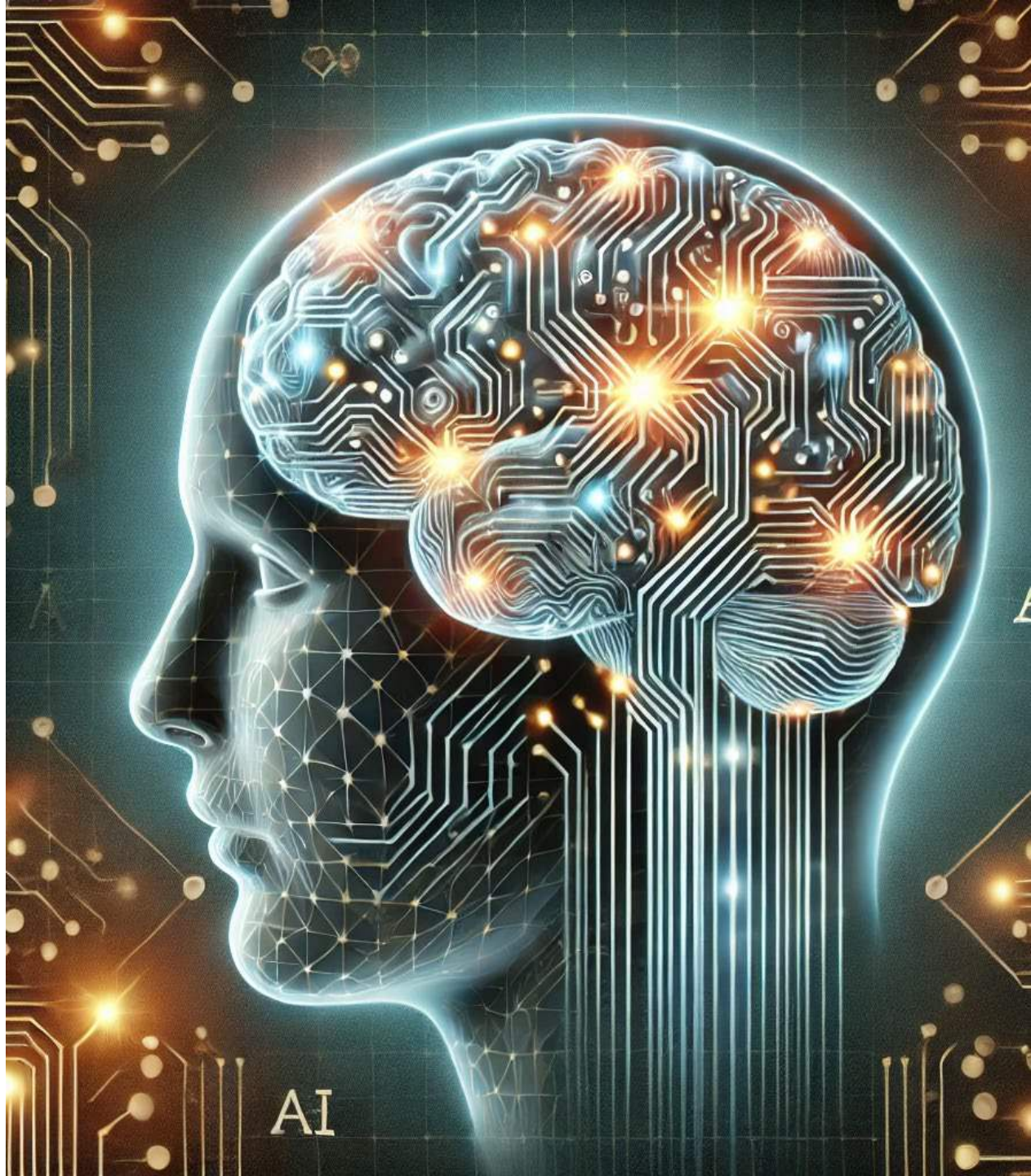
What are the main challenges of Generative AI for businesses?

Ethical and Legal Concerns

Quality and Reliability

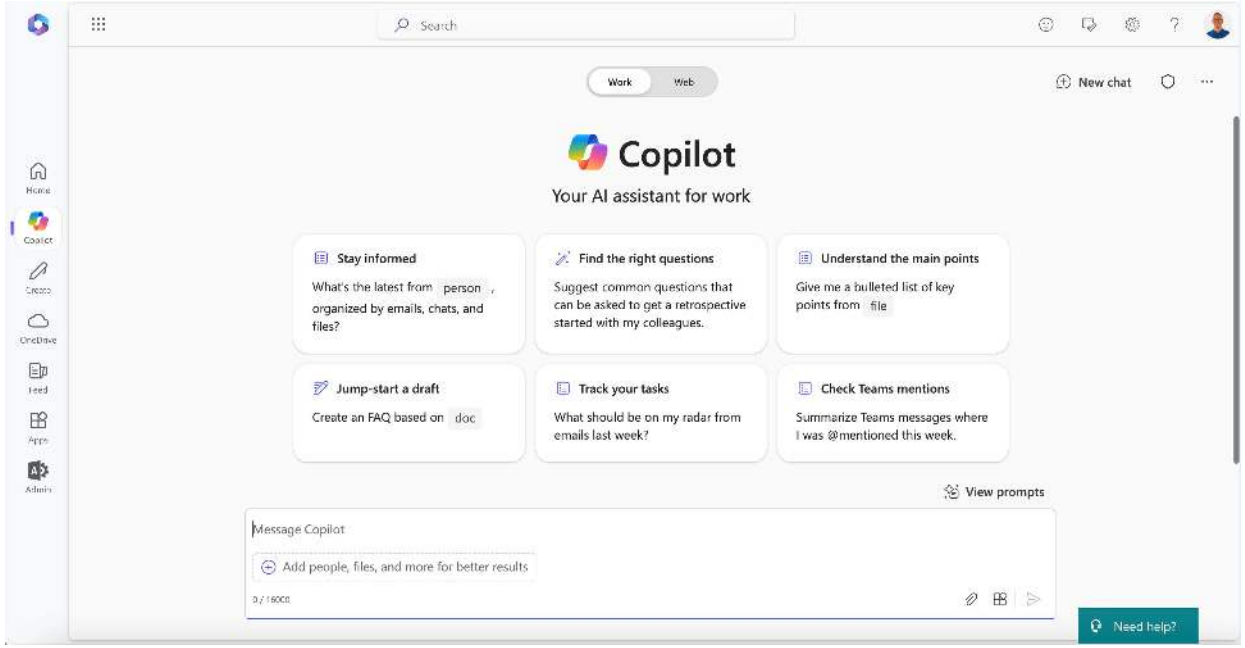
Security

Actual business context

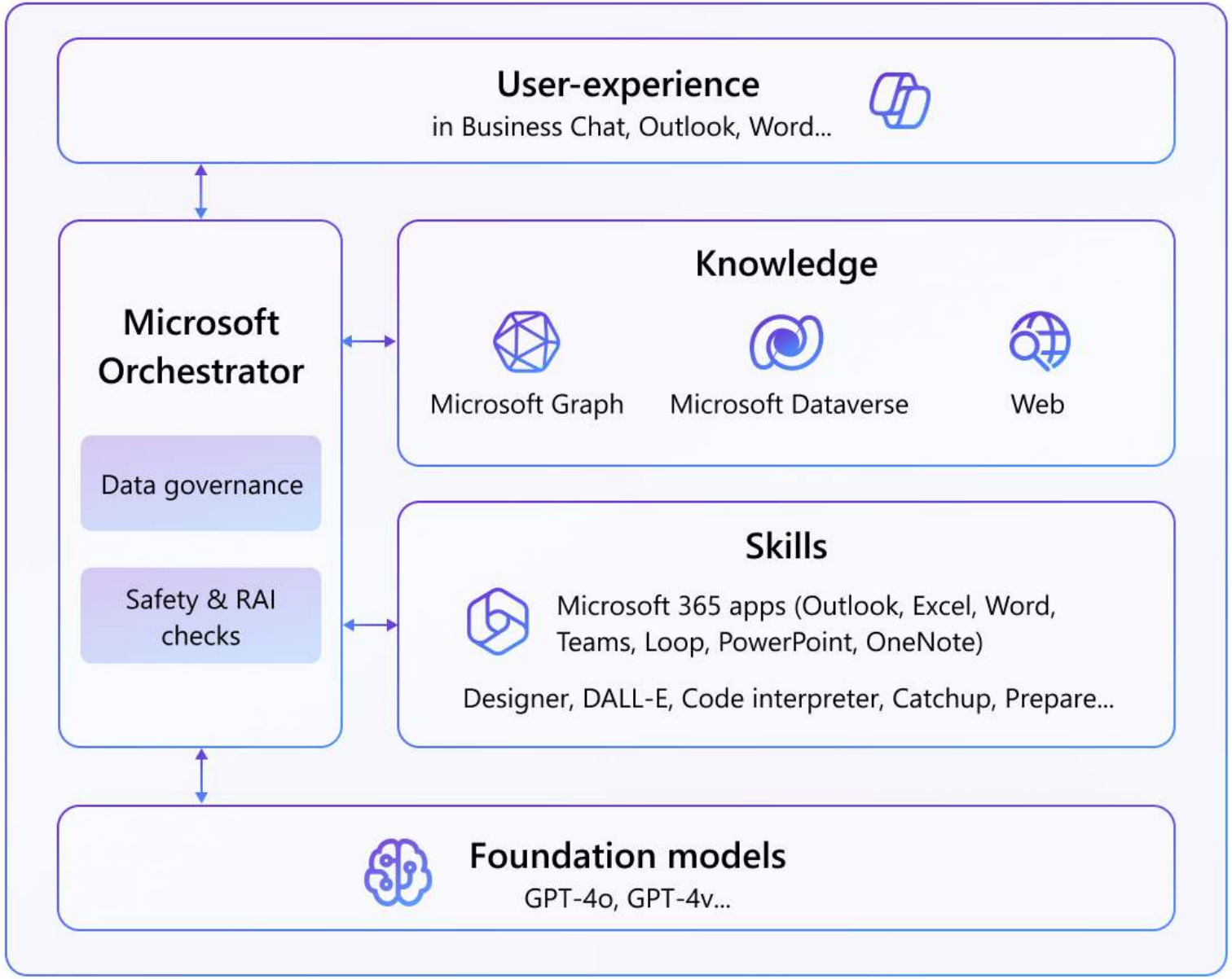


Microsoft 365 Copilot

- Microsoft 365 Copilot is an outstanding technology
  - Leverages Generative AI and Natural Language Processing
  - Uses your Microsoft 365 data as the main knowledge base
- Relies on e-mails, chats, documents, etc.
  - Handles data in a responsible, secure, and trustworthy manner
  - The knowledge base is the Semantic Index built on top of Microsoft Graph

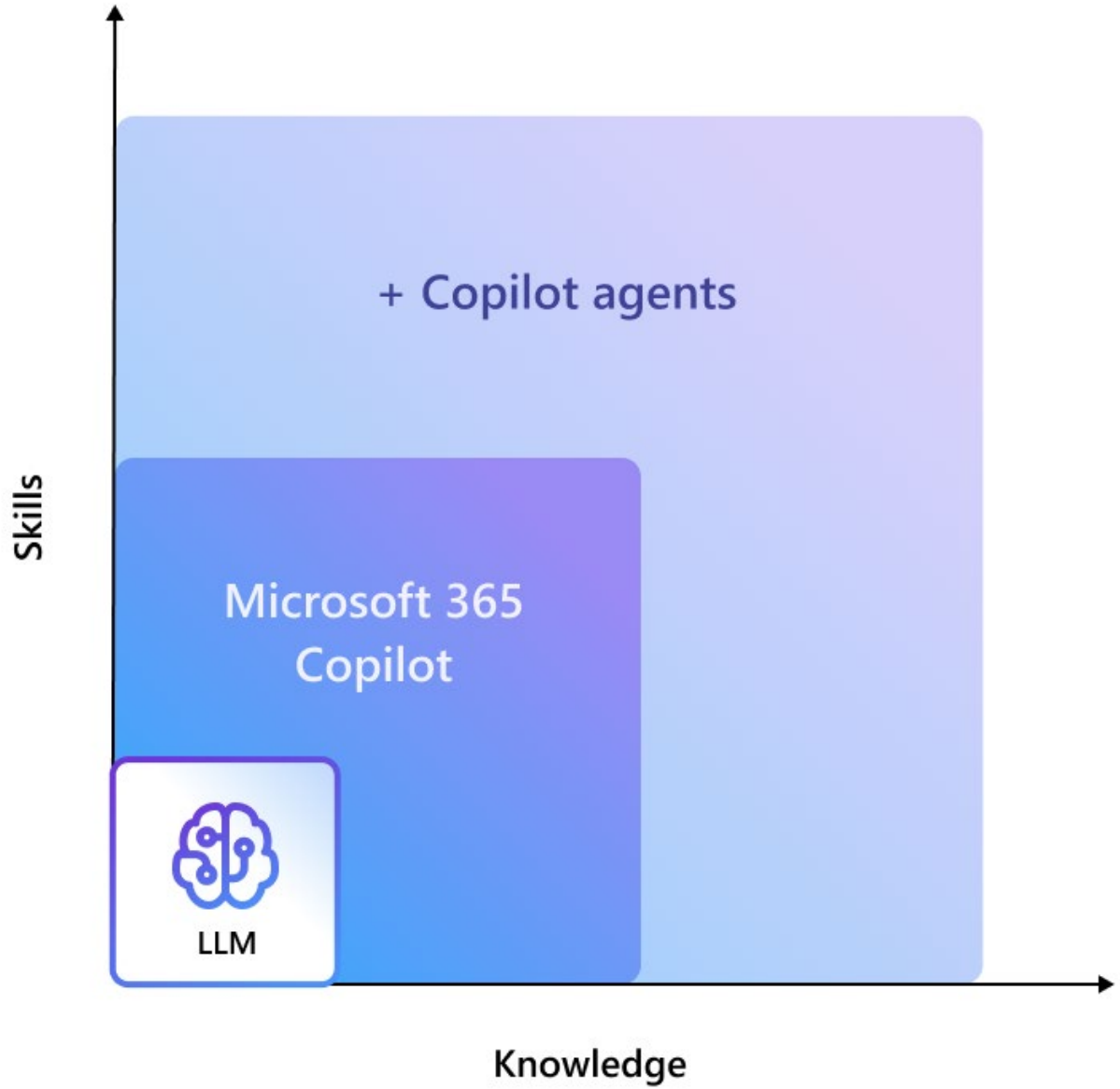


Anatomy of Microsoft 365 Copilot



What about other business data?

- Companies' data reside in multiple silos
  - ERP, CRM, Orders Management System, etc.
- Microsoft 365 data and documents are fundamental
  - But are not the only data that businesses rely on …
- We need a Copilot with knowledge that connects all those silos
  - Providing to the end users a unique, trustworthy, and secured knowledge base


+ Copilot agents
Microsoft 365 Copilot
LLM
Skills
Knowledge

Copilot Agents

Ground responses

Connectors

Bring actions

Agents

Focus user experiences

Your copilots

Extend Copilot with

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Microsoft Copilot Studio

- No-code tool to create Copilot agents
  - Part of the Power Platform family of tools
  - Built on top of the former Power Virtual Agents (PVA)
- Allows creating custom agents
  - Can be hosted through many channels
    - Teams, web site, mobile, Facebook, Slack, etc.
- Allows extending Microsoft 365 Copilot
  - You can create custom plugins
- There are a web app and a Teams app
  - Here we'll focus on the web app

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Overview of Microsoft Copilot Studio

What about SharePoint?

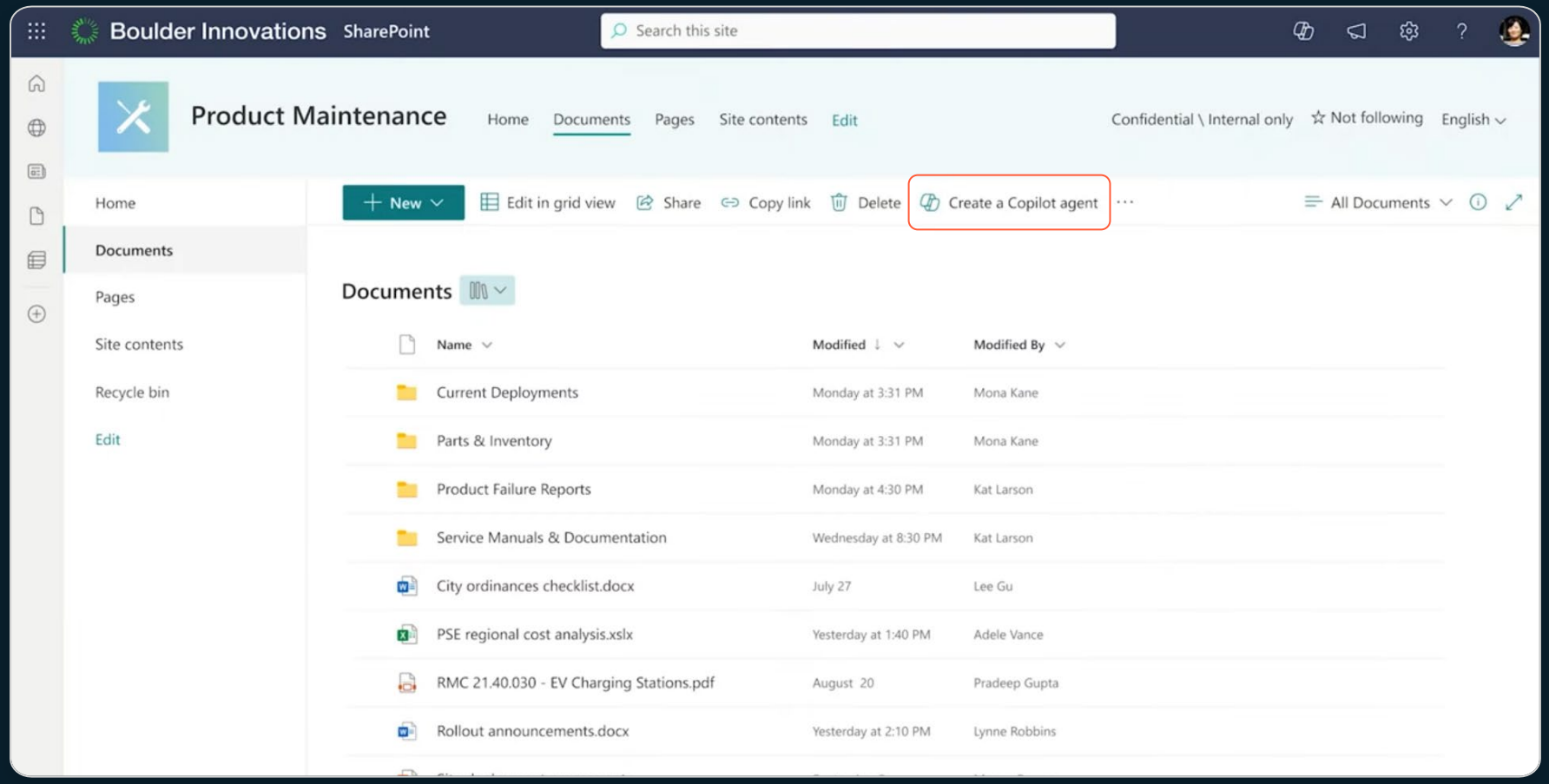
- Microsoft 365 Copilot can index content of documents
- At the moment does not index list items
- Nor the metadata of documents in libraries

Public Preview (soon)

Create Copilot agents for SharePoint

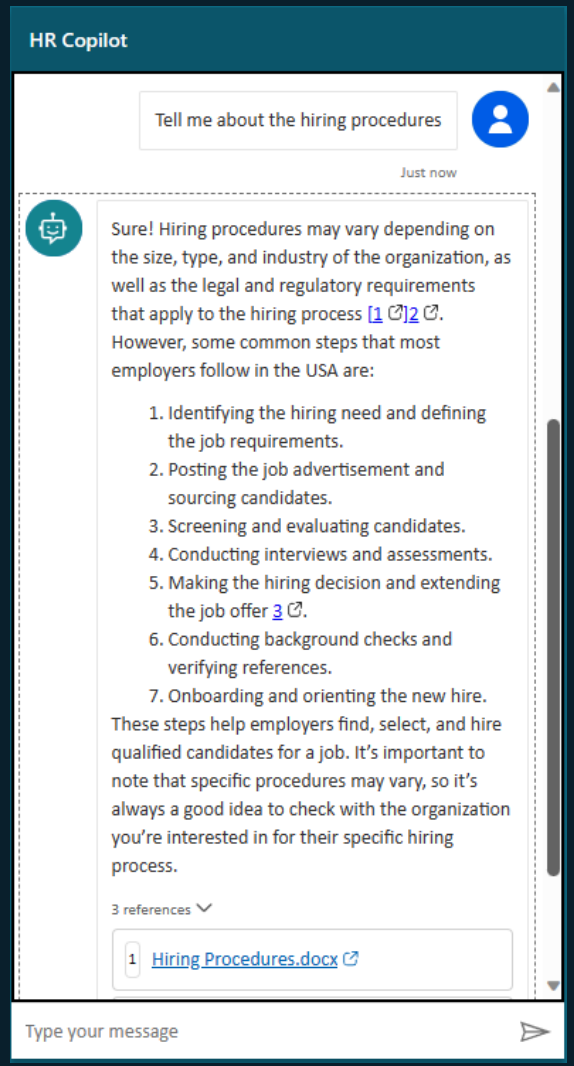
Put your content to work quickly by creating and sharing custom copilots grounded on the exact data your team needs

Grounded in your authoritative content	Any user can create, use, and share in a few clicks	Follows existing user access permissions	Edit and enhance with Copilot Studio integration



While waiting for Copilot Agents for SharePoint …

- But what if you want a Copilot Agent now?
  - Working on a specific subset of your data/documents?
  - Like an “HR Copilot”, an “R&D Copilot”, etc.
  - With full security in place
    - Users can only see what they are authorized to see!
- You can setup a SharePoint site collection
  - Using Microsoft Copilot Studio (MCS) you can create a Copilot Agent to work with that site content only



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Creating a Copilot Agent for SharePoint with Microsoft Copilot Studio

What are the supported content/files/length/size?

- Are supported up to 4 SharePoint URLs
- Supported content
  - SharePoint pages (modern pages only)
  - Word documents (docx)
  - PowerPoint documents (pptx)
  - PDF documents (pdf)
- Keep files short, best practices:
  - Less than 20 pages
  - Less than 15.000 words

Security Context

- Custom copilots in Microsoft Teams rely on automatic authentication
- Copilot Studio queries SharePoint content with Copilot user's Microsoft Entra ID authentication
- When a specific user asks a question to copilot
  - The copilot only surfaces content for that specific user to access
- To publish the custom copilot on other channels you need custom authentication properly configured

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Creating a Copilot Agent for SharePoint
with Microsoft Copilot Studio and custom Authentication

Creation Steps Recap

- Create a Copilot in Microsoft Copilot Studio
  - Add SharePoint site as knowledge for the custom copilot
- Configure Security with “Manual” Authentication
  - Register Entra ID application
    - Configure Web authentication with redirect URL provided by MCS
    - Create Shared Secret
    - Grant delegated permissions
      - Files.Read.All
      - Sites.Read.All
      - openid
      - profile
- Publish your custom copilot

What about Security?

- You configure Delegated permissions for the application
  - The resulting permissions will be the intersection between user's and app's permissions
- Users will only be able to see and consume data that they are authorized to
- Copilot Agent will only be able to consume data that both the user and the app have been authorized to
- Unfortunately Resource Specific Consent is not yet supported …
- You can configure Single Sign On in Teams so that users will "simply use the Copilot Agent"

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Configuring Single Sign On for your custom copilot

Enable Single Sign-on

- Configure Entra ID application for SSO
  - Authentication: Web
  - Client Secret
  - API Permissions: openid profile Sites.Read.All Files.Read.All User.Read
    - Admin grant of the permissions
  - Expose an API: api://botid-{ID-Of-Copilot-App}
    - Custom scope
    - Grant to Teams apps (web and desktop/mobile) with specific App IDs
- Configure custom Copilot Security
  - Manual Authentication
- Publish
- Add Teams Channel (or any other channel of your choice)
  - Configure Security
- Publish the custom copilot

Useful links

- https://learn.microsoft.com/en-us/microsoft-copilot-studio/nlu-generative-answers-sharepoint-onedrive
- https://learn.microsoft.com/en-us/microsoft-copilot-studio/configuration-end-user-authentication
- https://learn.microsoft.com/en-us/microsoft-copilot-studio/configuration-authentication-azure-ad
- https://learn.microsoft.com/en-us/microsoft-copilot-studio/advanced-end-user-authentication?tabs=web
- https://learn.microsoft.com/en-us/microsoft-copilot-studio/configure-sso-teams
- https://github.com/microsoft/CopilotStudioSamples/tree/master/SharePointSSOComponent

About me

- Solution Architect, Consultant, Trainer
  - PiaSys.com based in the USA and in Italy
- More than 50 Microsoft certification exams passed
  - MCSM – Charter SharePoint
  - MVP M365 Development + M365 Apps & Services
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Thank you!