

Custom Copilot Agent



The Challenge

After more than five years of continuous work on a long-running client engagement, our internal project team had accumulated a vast collection of supporting materials—architecture diagrams, meeting notes, test plans, requirement docs, etc. While this content was well-organized within Microsoft Teams, SharePoint, and OneDrive, the sheer volume and breadth of resources made it difficult to quickly locate specific information.

Team members were spending significant time manually opening documents, searching old Teams threads, and switching between platforms in pursuit of a single answer. In some cases, valuable insights were being overlooked or duplicated simply because no one could remember where a document lived. We needed a way to make this documentation more accessible without upending our existing structure.

The Solution

To address this challenge, we elected to develop a custom Copilot agent tailored specifically to our needs. This AI-powered assistant was trained exclusively on our internal, project-specific materials and not connected to the broader internet—ensuring trustworthy, contextually relevant responses.

Using Microsoft's Copilot Studio, we quickly configured an agent by pointing it to the relevant reference materials and applying our existing Entra ID security roles to enforce accessibility standards. With built-in natural language processing, the agent could interpret and respond to user queries in an intuitive and conversational way. Copilot Studio also allowed us to thoroughly test the agent before rolling it out to our team.

In the end, our custom-built agent was:

- **Secure**—trained on project-specific materials and bound by our existing Microsoft Entra roles.
- **Conversational**—able to understand and respond to natural language questions, such as:
 - *“What backend architecture did we go with?”*

- *“Summarize the test plan from Sprint 3.”*
- *“List known issues reported during UAT.”*
- **Traceable**—every answer linked back to its source document(s).

The Results

The introduction of this custom Copilot agent transformed how our team accessed project knowledge. Instead of jumping between multiple tools, team members could now get instant, reliable answers through a single interface—each response linked directly to its source documentation.

This streamlined access drastically reduced the time spent searching for information, accelerated onboarding for new team members by making institutional knowledge readily available and improved the overall accuracy of shared information across the team.

By turning a frustrating internal challenge into an opportunity to innovate, we not only enhanced our team’s efficiency but also created a scalable solution that can be replicated across other teams and projects.