**LAB-**11 **Create an engaging user experience for your agent**

**Deliver a seamless and engaging experience by customizing your agent’s conversation start with rich interactions.**

# Lab Details

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| --- | --- | --- | --- |
| Level | Persona | Purpose | Estimated time to complete |
| 200 | Advanced Maker | After completing this lab, attendees will be able to design an engaging conversation start for their agent using rich content such as Adaptive Cards with great design, customized further in the Adaptive Card Designer. | 20 minutes |

## Prerequisites

You need to have access to Microsoft Copilot Studio using <https://copilotstudio.microsoft.com/>.

You can either customize the agent from **LAB-10 Create a knowledge agent for your public website** or create a new agent with at least one knowledge source.

## Summary of targets

Create an engaging user experience by customizing the conversation start topic of your agent with rich content. Learn how to enhance interactions using Adaptive Cards with great design, refine them in the Adaptive Card Designer.

Adaptive Cards are lightweight, flexible UI components that display rich content in a visually appealing way across different platforms. They allow you to present structured information, images, buttons, and interactive elements in a clean, responsive format. In Copilot Studio, Adaptive Cards enhance user interactions by making responses more engaging and intuitive, guiding users with quick replies, and ensuring a seamless conversational flow.

| Use case/topic | Tagline | Page |
| --- | --- | --- |
| Enhance conversation start with rich, interactive content [conversation start customizations and Adaptive Cards] | Beautiful! – Design a clean, engaging, and effective conversation start using Adaptive Cards | 3 |
| Summary of learnings | Mastery is not a destination but a journey—a joyful path where every step brings growth, discovery, and endless possibilities. | 7 |
| Glossary | Speak the language, bridge the world—unlock hearts, opportunities, and the true essence of every land. | 9 |

## Documentation and additional training links

* [Add an Adaptive Card to a Copilot Studio message or question](https://learn.microsoft.com/en-us/microsoft-copilot-studio/authoring-send-message#add-an-adaptive-card)
* [Adaptive Cards](https://adaptivecards.io/)
* [AdaptiveCards-Templates GitHub repository](https://github.com/pnp/AdaptiveCards-Templates)
* [Designing Adaptive Cards for your app - Teams](https://learn.microsoft.com/en-us/microsoftteams/platform/task-modules-and-cards/cards/design-effective-cards?tabs=design)
* [Samples and Templates | Adaptive Cards](https://adaptivecards.io/samples/)
* [Designer | Adaptive Cards](https://adaptivecards.io/designer/)
* [Actionable Messages Designer](https://amdesigner.azurewebsites.net/)
* [aka.ms/CopilotStudioKit](https://aka.ms/CopilotStudioKit) (that contains an Adaptive Cards gallery)
* [Create and edit topics](https://learn.microsoft.com/en-us/microsoft-copilot-studio/authoring-create-edit-topics?tabs=webApp)

# Use Case #1: Enhance conversation start with rich, interactive content

*Beautiful! – Design a clean, engaging, and effective conversation start using Adaptive Cards.*

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| Use case | Value added | Estimated effort |
| Enhance conversation start with rich, interactive content | Quickly captivate users by customizing conversation starters with engaging, interactive Adaptive Cards. | 20 minutes |

## Summary of tasks

In this section, you’ll enhance the user experience of your Copilot Studio AI assistant by customizing the conversation start. You’ll replace the default welcome message with an Adaptive Card to create a visually engaging introduction. Additionally, you’ll configure quick replies to guide users toward common questions and ensure a smooth interaction flow. Finally, you’ll explore the Adaptive Card Designer to refine your card’s design and functionality.

**Scenario**: Visitors to your website expect quick, intuitive, and engaging interactions. A simple text-based welcome message may not be enough to capture their attention or guide them effectively. In this lab, you’ll transform your AI assistant’s conversation start into a rich, visually appealing experience. By replacing the default welcome message with an Adaptive Card and adding quick replies, you’ll ensure users are immediately drawn into the conversation and directed toward the most relevant topics. This enhancement not only improves usability but also reinforces your brand’s identity and communication style.

## Step-by-step instructions

1. Navigate to the Copilot Studio **agent** you have created for this lab (e.g., LAB-10, or a new one).

<https://aka.ms/MCSStart>

1. Go to the **Topics** tab, display **All**, and select **Conversation Start**.

**Clear** any existing text from the message node **without deleting the node itself**. We'll replace the introduction with a richer design using Adaptive Cards.

Select **Add** and choose **Adaptive card**.

*For this lab, we’ll provide you with a template, but you can explore many other great templates. Check out the Documentation and Additional Training Links section to find more resources!*

**Go** to [CopilotStudioSamples/AdaptiveCardSamples/ConversationStart.json](https://github.com/microsoft/CopilotStudioSamples/blob/master/AdaptiveCardSamples/ConversationStart.json) and copy the JSON code.

**Paste** the JSON in the Adaptive Cards properties input box.

1. While still on the **Conversation Start** topic and the welcome **message**, if you haven’t already, select **Add**, then choose **Quick Reply**. These act as suggested conversation starters for the user. When selected, the input is sent to the agent just as if the user had typed it themselves.

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| * What is Copilot Studio? * How does message consumption work? * How can I secure my agents? |

1. **Refresh** the test pane and experience the updated conversation start firsthand!

A screenshot of a phone

AI-generated content may be incorrect.

1. **Save** your topic
2. **Optional**: Further customize your Adaptive Card using the <https://www.adaptivecards.io/designer/> website.

In the top-right corner, set the **Target version** to **1.5**.

In the **CARD PAYLOAD EDITOR** section, **paste** the entire JSON from Step 2.

Use the editor to modify various properties of the card, such as:

* **Text blocks** (update content, change font size, weight, or alignment)
* **Images** (adjust size, position, or replace with new ones)
* **Columns** and **layouts** (rearrange sections, add new elements)
* **Actions** and **buttons** (define user interactions)

Experiment with different design tweaks to see how they impact the card’s appearance and functionality in real time. For example, can you try to make the Product, Pricing, and How-To tyle act as buttons that would send predefined messages to the agent?

When you are happy with your changes, **copy** the content from the **CARD PAYLOAD EDITOR** and paste it back into Copilot Studio to apply your updates.

A screenshot of a computer

AI-generated content may be incorrect.

**💡 PRO TIPS:**

* For this demonstration, images are embedded directly in the Adaptive Card using data URLs, which store SVGs as text within the JSON. While this keeps everything self-contained, it’s not a best practice. Data URLs increase payload size, slow down delivery, prevent caching, and make conversation transcripts heavier. Instead, host images on your website or a CDN and reference them with a URL for better performance and efficiency.
* In Copilot Studio, you can toggle from JSON in to Power Fx, effectively enabling to create dynamic adaptive cards that can then reference your variables for rich, dynamic, experiences.
* When adding actions to Adaptive Cards—whether as ActionSet buttons or selection actions on UI elements (e.g., an image or column)—it's best to use Action.Submit and set the Data property to the text you want sent on behalf of the user.
* Adaptive Card behavior varies by client. For example, in Microsoft Teams, you can’t just set a string in the Data property; you must use a structured record array that follows Teams' expected format:

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| "selectAction": {      "type": "Action.Submit",      "data": {          "msteams": {              "type": "messageBack",              "text": "What is Copilot Studio?"          }      }  } |

## Test your understanding

Now that you’ve customized the conversation start for your agent, take a moment to reflect on what you’ve learned.

**Key takeaways:**

* Enhanced User Engagement – Replacing the default welcome message with an Adaptive Card creates a visually appealing and interactive experience.
* Guided Conversations – Quick replies help users start their interaction with relevant questions, making it easier to navigate the assistant’s capabilities.
* Customization Options – The Adaptive Card Designer allows further refinement, ensuring the design aligns with your brand and user needs.
* Best Practices – Hosting images on a website or CDN improves performance, and structuring actions properly ensures compatibility across different clients, such as Microsoft Teams.

**Lessons learned & troubleshooting tips:**

* If your Adaptive Card isn’t displaying correctly, check for formatting issues in the JSON. It could be a version mismatch (e.g., version 1.6 isn’t supported on all clients) or limitations from the client displaying the card to the user (e.g., some clients don’t support Adaptive Cards or activities that exceed a specific size in KB).
* For best performance, avoid using embedded data URLs for images—instead, use hosted URLs.
* If deploying to Microsoft Teams, remember that Action.Submit requires a structured data format.

**Challenge: apply this to your own use case**

* How would you design an Adaptive Card for your own website’s AI assistant?
* What common questions should be included as quick replies to help users engage effectively?
* How can you use Adaptive Cards in other areas of your agent to improve user interactions?

Take it further: Experiment with different Adaptive Card designs or test variations in the tone of quick replies. How does this impact user engagement?

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# Summary of learnings

Une image contenant jaune, conception

Le contenu généré par l’IA peut être incorrect.*Mastery is not a destination but a journey—a joyful path where every step brings growth, discovery, and endless possibilities.*

Great job completing this lab! You’ve explored how to create a more engaging user experience by customizing the conversation start for your AI assistant. With Adaptive Cards, you’ve learned how to improve the way users interact with your agent right from the first message.

* **Creating a rich user experience** – Replacing the default welcome message with an Adaptive Card provides a structured and visually appealing way to introduce your assistant.
* **Driving user engagement** – Quick replies suggestions keep conversations flowing and guide users toward relevant topics.
* **Customizing Adaptive Cards** – The Adaptive Card Designer allows for deeper personalization, ensuring the design aligns with your brand and enhances usability.
* **Following best practices** – Hosting images externally instead of using data URLs improves performance, and structuring actions correctly ensures compatibility across platforms like Microsoft Teams.

**Conclusions and recommendations**

To make the most of your agent’s conversation start:

* Regularly refine Adaptive Cards to improve the user experience and maintain a polished look.
* Ensure that images are hosted externally for better performance and scalability.
* Test the experience across different clients (e.g., web, Teams) to confirm expected behavior.

By applying these best practices, you’ll create an AI assistant that delivers a seamless, intuitive, and engaging experience for users, setting the tone for productive interactions.

**We want your feedback!**

[**Start now**](https://nam06.safelinks.protection.outlook.com/?url=https%3A%2F%2Fforms.office.com%2FPages%2FResponsePage.aspx%3Fid%3Dv4j5cvGGr0GRqy180BHbRzJVkDds8yROvOeWrHDKUXBUNVpZNkxROVhWTEdGWkxGSDZYT1ZCSTkzUC4u%26origin%3DInvitation%26channel%3D0&data=05%7C02%7Caudrie%40microsoft.com%7C4e6ff36c093046f2c32108dd4150a067%7C72f988bf86f141af91ab2d7cd011db47%7C1%7C0%7C638738536716903326%7CUnknown%7CTWFpbGZsb3d8eyJFbXB0eU1hcGkiOnRydWUsIlYiOiIwLjAuMDAwMCIsIlAiOiJXaW4zMiIsIkFOIjoiTWFpbCIsIldUIjoyfQ%3D%3D%7C0%7C%7C%7C&sdata=https://aka.ms/MCSLabsFeedback%3D&reserved=0)

**Recommended next steps**

To continue building your expertise, consider diving into these advanced labs:

* **LAB-12 Measure success - Track conversation outcomes and user feedback on AI responses**  
  Learn how to improve conversation tracking by refining the end of conversation topic, enabling rich insights into conversation analytics and KPIs, and offering feedback collection for AI-generated responses.

# Glossary

*Speak the language, bridge the world—unlock hearts, opportunities, and the true essence of every land.*

**Adaptive Cards:**Adaptive Cards are lightweight, flexible UI components that display rich content in a visually appealing way across different platforms. They allow you to present structured information, images, buttons, and interactive elements in a clean, responsive format. In Copilot Studio, Adaptive Cards enhance user interactions by making responses more engaging and intuitive, guiding users with quick replies, and ensuring a seamless conversational flow.

**Agent:**  
A digital assistant powered by AI, capable of understanding and responding to user inputs. In Copilot Studio, agents can be customized to for conversational experiences and/or can act autonomously based on pre-configured triggers and instructions.

**Channel:**  
A communication medium or platform through which users interact with an agent, such as a website, telephony, WhatsApp, Facebook messenger, Microsoft Teams, Slack, etc. While Copilot Studio can be seen as the engine or back-end, the channels effectively relay the activities between the agent and the end-user interacting through a client – or front-end. Each channel and client may each have their own specificities and limitations.

**Generative Answers / AI:**  
Responses created dynamically by AI based on user inputs and available knowledge sources. These answers are not pre-programmed but are generated in real-time using large language models and generative AI.

**Instructions:**  
Custom settings or guidelines configured in Copilot Studio to shape the behavior of Copilot agents. Instructions define how the agent should respond to specific queries or scenarios.