

# Lab 4: Configure Semantic Model for Data Agent

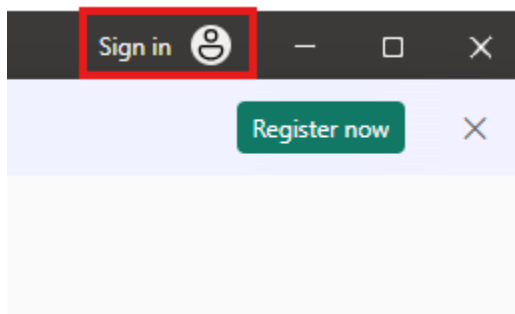
## Pre-requisites

1. You have installed PBI Desktop: [Power BI Desktop - Free download and install on Windows | Microsoft Store](#)

## Lab Steps

### Step 1: Open PBI Desktop and Log In

1. Open PBI Desktop, and **Sign in** to your account provided for this tutorial:



2. When asked if you want to automatically sign into all desktop apps on this device, we highly recommend clicking **“No, this app only”**

## Automatically sign in to all desktop apps and websites on this device?

Selecting **Yes, all apps** will:

- Allow us to use your work or school account to sign you in to other desktop apps and websites you use on this device.
- Register this device with your organization, allowing your organization to view device information like the device's name.

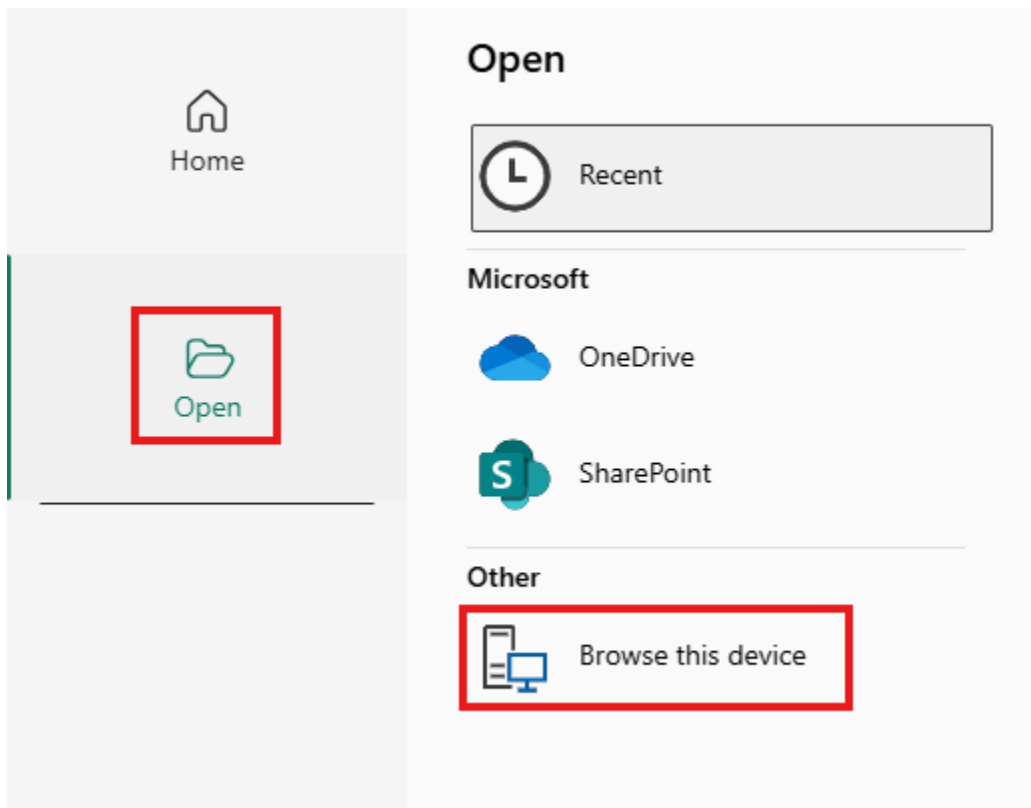
**Is this a shared device?** If so, consider signing in to this app only.

[Learn more](#)

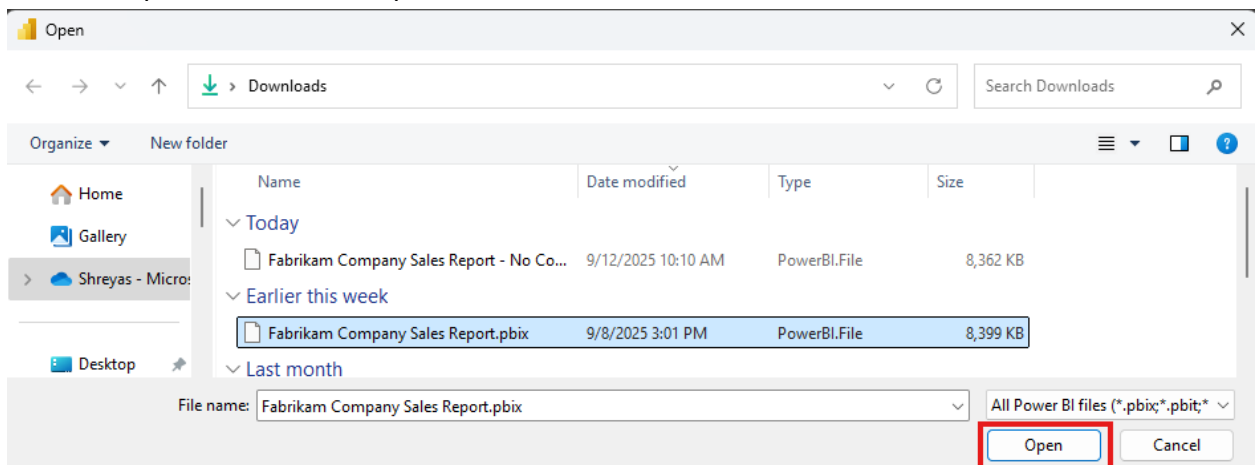
Yes, all apps

No, this app only

3. Select Open -> Browse this device

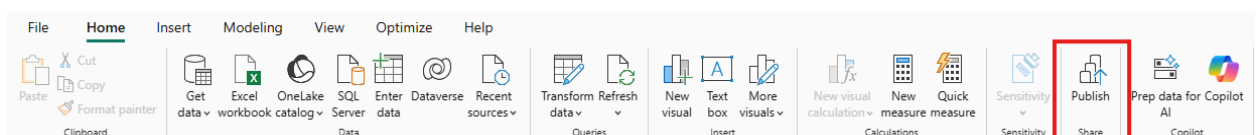


4. Select the pbix file, and hit “Open”



5. At this point, you should see a PBI report loaded onto your PBI Desktop App. Most of the configurations and settings will be done from here, and we will publish this to our Fabric Workspace with each update. Let’s start by publishing this report to our Fabric Workspace.

Under the Home menu select “Publish”



6. Select your Workspace Name (should be on your account slip) as the destination, and hit “Select”

**Publish to Power BI** ×

Select a destination

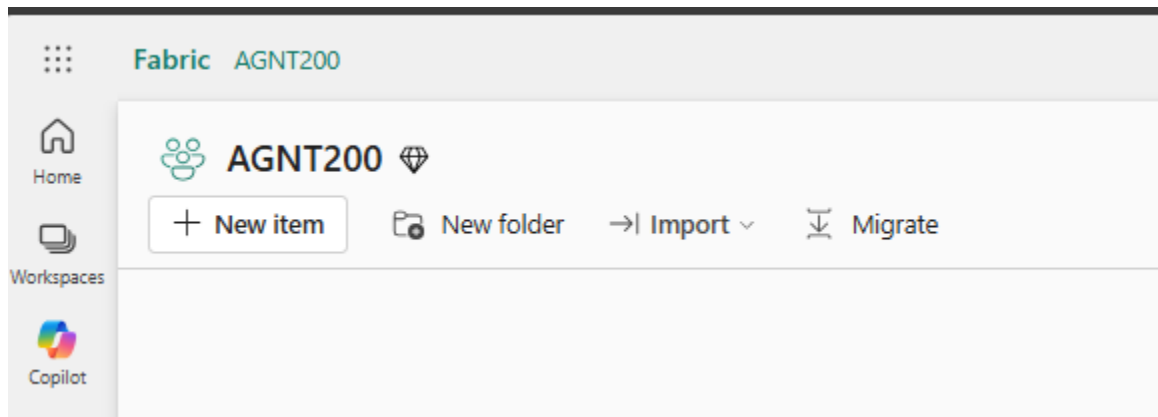
×

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7. You have now Published the PBI Report directly onto your workspace!

## Step 2: Connect Your Data Agent to the Semantic Model

1. Let’s start by going back to our workspace in Fabric:

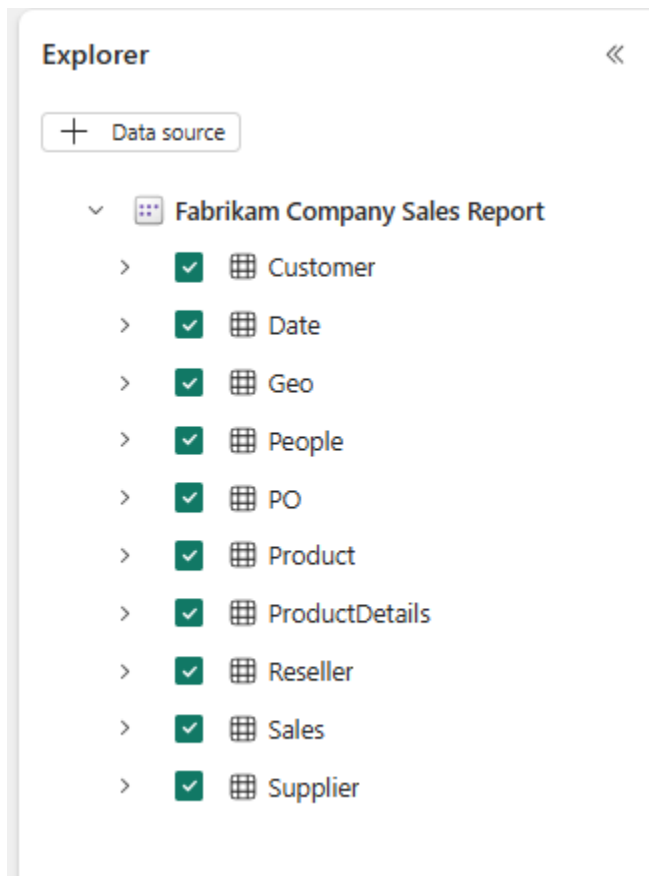


2. Confirm that you see the Semantic Model and PBI Report in your workspace:

	Fabrikam Company Sales Report	Report
	Fabrikam Company Sales Report	Semantic model



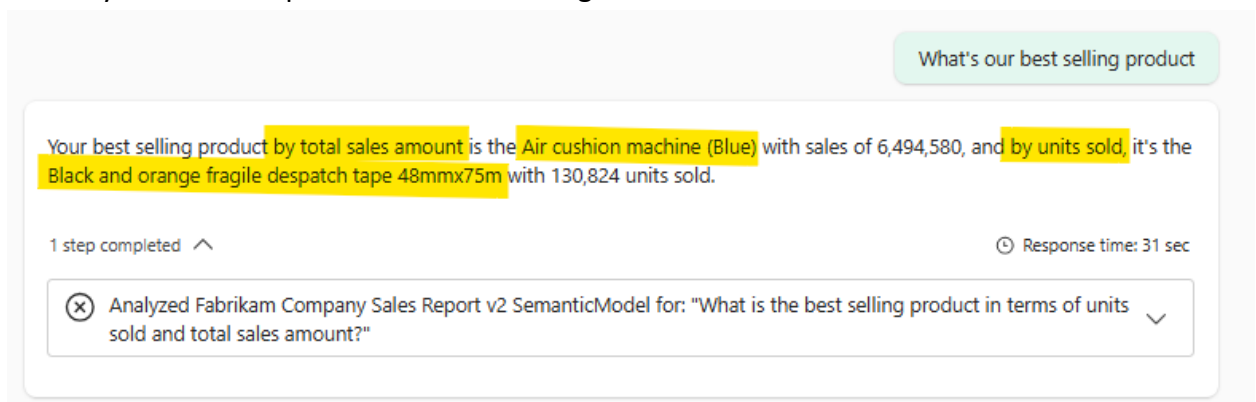
7. Select ALL Tables in the Schema:



## Step 4: Use AI Instructions from Prep for AI to Improve Data Agent Results

8. Ask the question: "What's our best selling product"

You may receive a response like the following:



While not incorrect, Data Agent gives you 2 different responses. Let's add an instruction to specify what we mean by "best selling."

You may notice that Some configurations are blocked for Semantic Models:

### Data source instructions

For each connected data source, help the data agent understand its data and how to use it most effectively.

**Fabrikam Company ...** ^

Currently data source instructions for semantic models aren't supported.

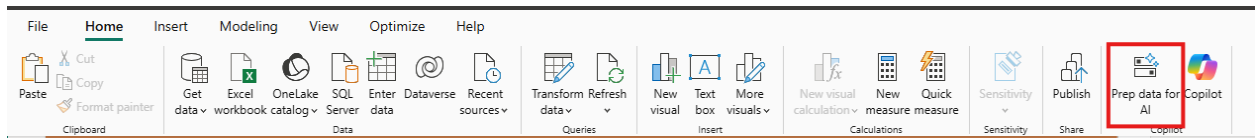
### Example queries

For each data source, add common questions and how to interpret them.

**Fabrikam Company Sales Rep...** ^

Currently example queries for semantic models aren't supported.

9. Let's navigate to the PBI Desktop App with this Semantic Model , and select **"Prep for AI"**



10. Select **"Add AI Instructions"** then input the following instruction:

### Prep data for AI

Get started

Simplify the data schema

Verified answers

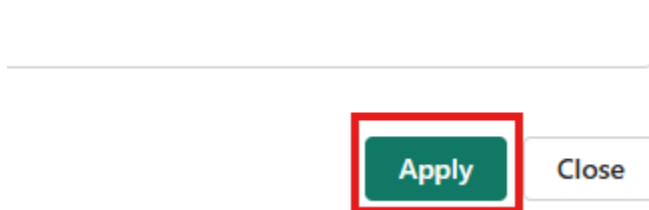
**Add AI instructions**

### Add AI instructions (preview)

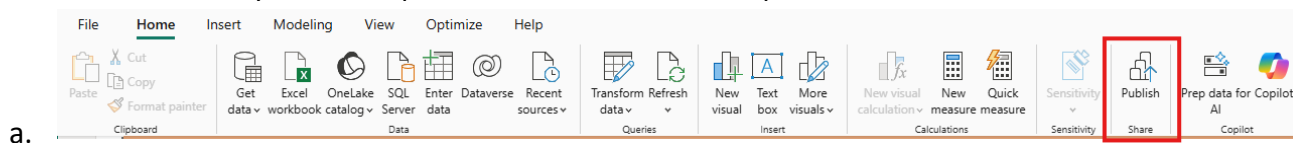
Provide context on important data fields, business goals, and industry terms to imp

Best selling = most units sold  
Highest selling = total sales value

11. Hit **Apply**, then **Close**



12. Hit **"Publish"** -> Select your Workspace -> Click **"Select"** -> **"Replace"**



## Publish to Power BI



Select a destination

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Select

Cancel


b.

## Replace this dataset?



You already have a semantic model named 'Fabrikam Company Sales Report v2' in Power BI.

Replacing this dataset may impact:

 1 report

View the impact of this change on the content in the Power BI service.

[View impact](#)

Replace

Cancel

c.

13. Let's reopen the Data Agent, and clear the chat:

Home



AI instructions



Example queries



Clear chat



14. Ask the question again: “What’s our best selling product” and then ask “What’s our highest selling product”

The screenshot shows two chat messages in the Data Agent interface. The first message asks "What's our best selling product" and the response is "Our best selling product is the 'Black and orange fragile despatch tape 48mmx75m,' with 130,824 units sold." The second message asks "What's our highest selling product" and the response is "Our highest selling product by total sales value is the 'Air cushion machine (Blue)' with sales amounting to 6,494,580." Both messages show "1 step completed" and response times of 22 sec and 9 sec respectively.

Notice the Data Agent used the instructions we provided from the PBI Desktop’s Prep for AI!

## Step 5: Use Verified Answers

1. Clear the chat in Data Agent:

The screenshot shows the Data Agent interface with a toolbar at the top. The "Clear chat" button, represented by a trash icon, is highlighted with a red rectangle.

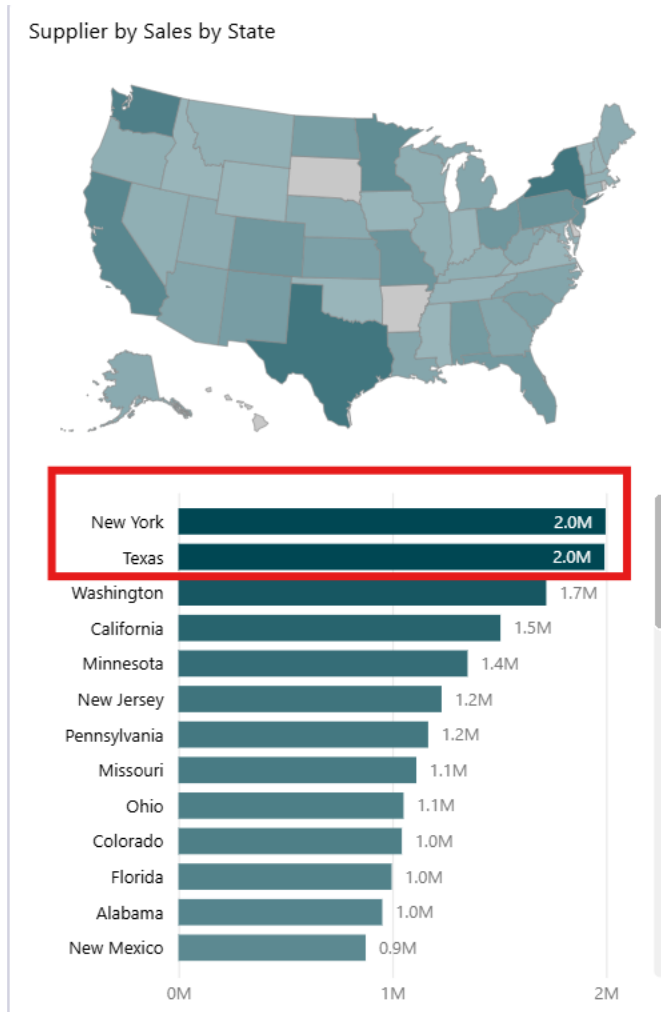
2. Ask the question “What state has the most sales”

The screenshot shows a chat message asking "What state has the most sales". The response is "The states with the most sales—each having the highest total sales—are Alaska (AK), California (CA), Florida (FL), New Jersey (NJ), New York (NY), and Washington (WA). They all share the same top sales figure." Below the response, it shows "1 step completed" and a response time of 13 sec. At the bottom, there is a verified answer box with a checkmark icon and the text "Analyzed Fabrikam Company Sales Report v2 SemanticModel for: 'Which state has the highest total sales?'"

3. Open the PBI Report and go to the “Product detail” tab:

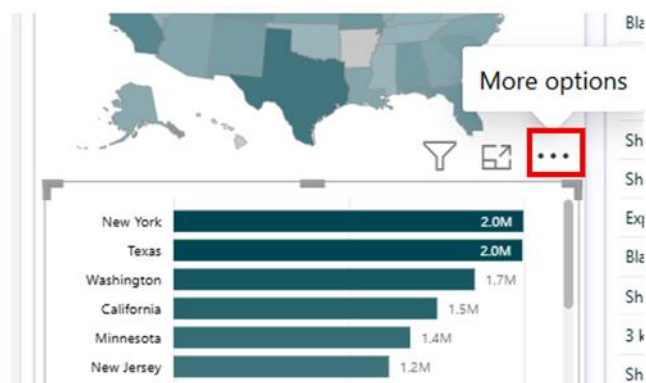
The screenshot shows the PBI Report interface with a tab bar at the top. The "Product detail" tab, which has a close button (x), is highlighted with a red rectangle. Other tabs visible are "Units sold detail", "Highest selling product", and "Best selling product". A green plus button is on the right.

4. In this tab, you may notice that we have an overview of Supplier by Sales by State:

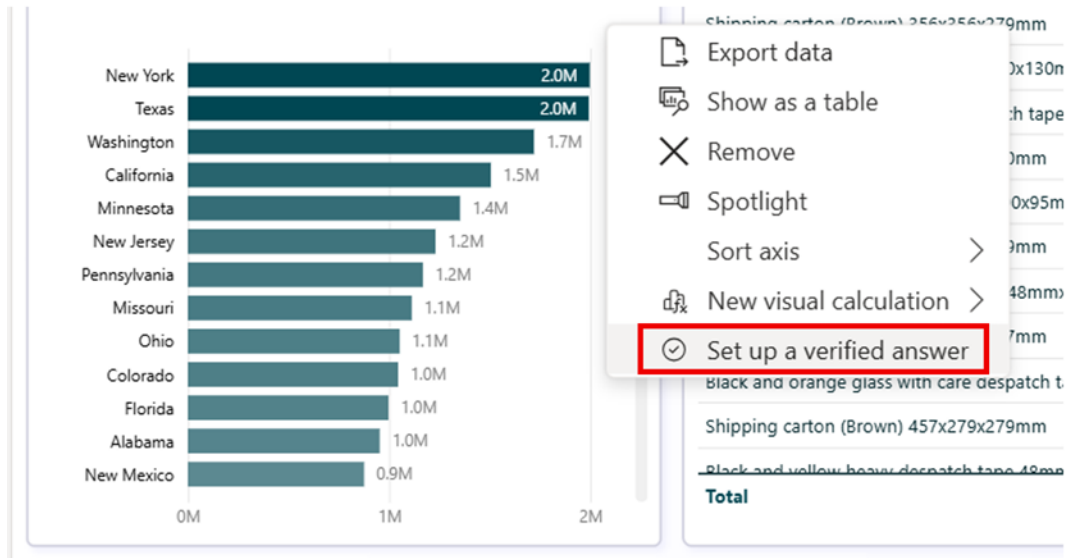


Based on this result, we can expect that the correct answer *should* be New York or Texas. Since we already have this result saved in PBI, we can use Verified answers to improve the result.

5. Click into the Visual, and select the 3 dot menu



6. Choose the option to **Set up a verified answer**



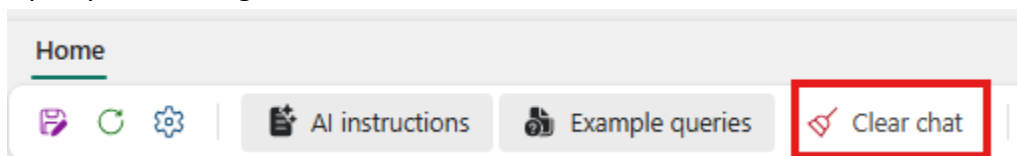
- Set a trigger phrase by either selecting the copilot suggestion or by typing in your own custom trigger phrase:

**Phrases connected to verified answers**

Add phrases people might use when asking about the model data, and Copilot will respond with this visual. Test your phrases out in the chat before publishing.

Copilot suggestions

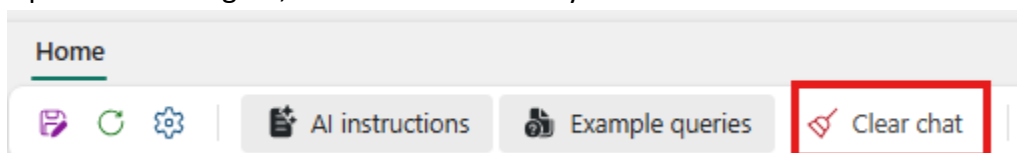
- Click “Apply” then “Close”
- Publish this report to your workspace using “Publish”
- Open your Data Agent, and Clear Chat



- Try asking the question again:  
“What state has the most sales”

## Step 6: Simplify the Data Schema

- Open the Data Agent, and clear Chat History



## 2. Ask the question “Which customer had the most sales?”

Which customer had the most sales?

The customers with the most sales are Constance Barton, Lowell Bauch, Jeremiah Grant, Ramona Dare, Lynette Emmerich, and several others. Each of them had the highest recorded total sales of 6,494,580.

If you would like details about a specific customer or more about the dataset, let me know!

1 step completed ^

⌚ Response time: 11 sec

✓

Analyzed Fabrikam Company Sales Report v2 SemanticModel for: "Which customer had the highest total sales?"

▼

You will notice that answer to this question lists out individual names. For this organization, the customer is defined as the resellers who sell our products. The people at their stores who buy the products are not considered *our* customers. However, in the data this is not clear today

Our customers are the resellers who buy & then sell our products. But today, when we ask Copilot about customer sales it defaults to individuals buying products instead of the resellers who buy & then sell our products for us.

Let's use Prep for AI to resolve this!

3. Navigate back to your PBI Desktop App, and Open up **Prep for AI**, and Select the “**Simplify the data schema**” tab, and deselect Customer.

## Prep data for AI

Get started

**Simplify the data schema**

Verified answers

Add AI instructions

## Simplify the data schema (preview)

Improve response accuracy by deselecting fields Copilot does not need

Filter by keyword

✓ ☒  Fabrikam Company Sales Report v2

> ☐  Customer

> ☒  Date

> ☒  Geo

> ☒  People

> ☒  PO

> ☒  Product

> ☒  ProductDetails

> ☒  Reseller

> ☒  Sales

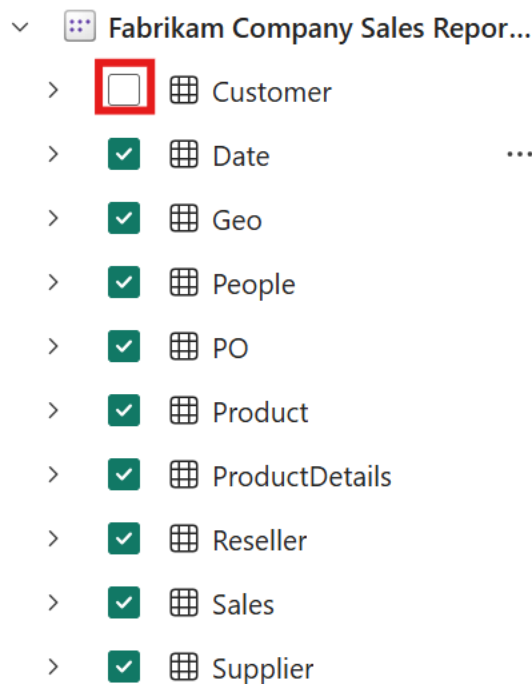
> ☒  Supplier

4. Click **Apply**
5. Navigate to the **AI Instructions** Tab, and add the following instruction:

When a user asks questions related to **\*\*customers\*\***, they are referring to **\*\*resellers\*\***

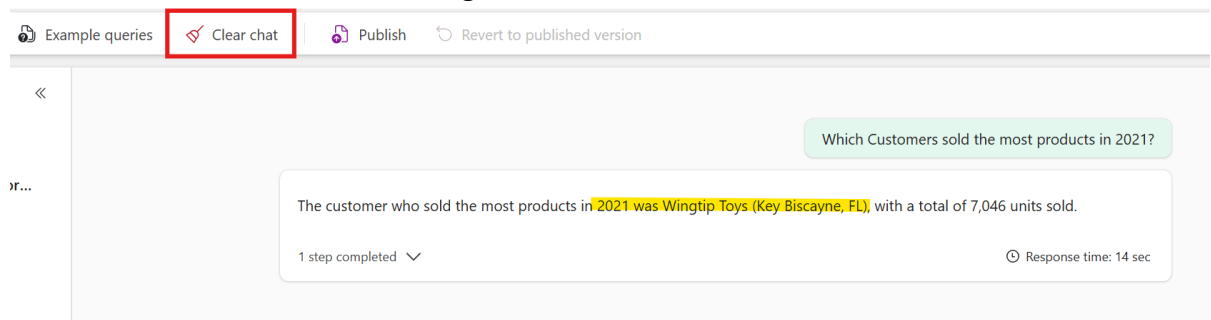
6. Click **Apply** and **Close**

7. Open the Data Agent, and ensure you deselect the “Customer” Table



When working with Semantic Models and Prep for AI, it's crucial that we match the Table selection in both Prep for AI and Data Agent. This ensures that there is no unintended context passed to the LLM. In this case, we don't want unintended data on Customers to be passed to the LLM which may cause some confusion with the instruction we have provided.

8. **Clear Chat**, and ask the Question Again.



Notice that the Data Agent was able to use the Table Selection and Context we set up in Prep for AI to answer this question!

## Conclusion

And that concludes this lab!