Konversation mit Ihren SAP Daten

Use the Microsoft Power Platform to automate SAP activities in Microsoft Teams

Expand this architecture to leverage Azure OpenAI to have a conversation with your SAP data.

Michael Mergell

Sr. Cloud Solution Architect – SAP on Azure

https://www.linkedin.com/in/michaelmergell/

AGENDA

1 Architecture: Use the Microsoft Power Platform to automate SAP activities in Microsoft Teams

2 Demo: SAP use case in Teams leveraging the Power Platform and the SAP ERP Connector

3 Architecture: Leverage Azure OpenAI to have a conversation with your SAP data.

4 Demo: Conversation with your SAP data

**5** Outlook: The next level

6 Additional resources

Use the Microsoft Power Platform to automate SAP activities in Microsoft Teams

COMMUNICATE A PLANNED SAP MAINTENANCE

ARCHITECTURE

1. A Teams chat triggers the Power Virtual Agent (PVA) bot and receives further info from the user

2. The PVA bot calls the flow

3. The flow triggers the SAP ERP connector

4. Via the Data Gateway an entry is made in SAP (SM02) to inform all active users

5. M365 connectors send the info to various places:
   - SharePoint
   - Mail
   - Teams Channel

Teams

Power Virtual Agent Chat Bot

Power Automate Flow

SAP ERP Connector (RFC BAPI)

Azure Data Gateway

M365 Connectors
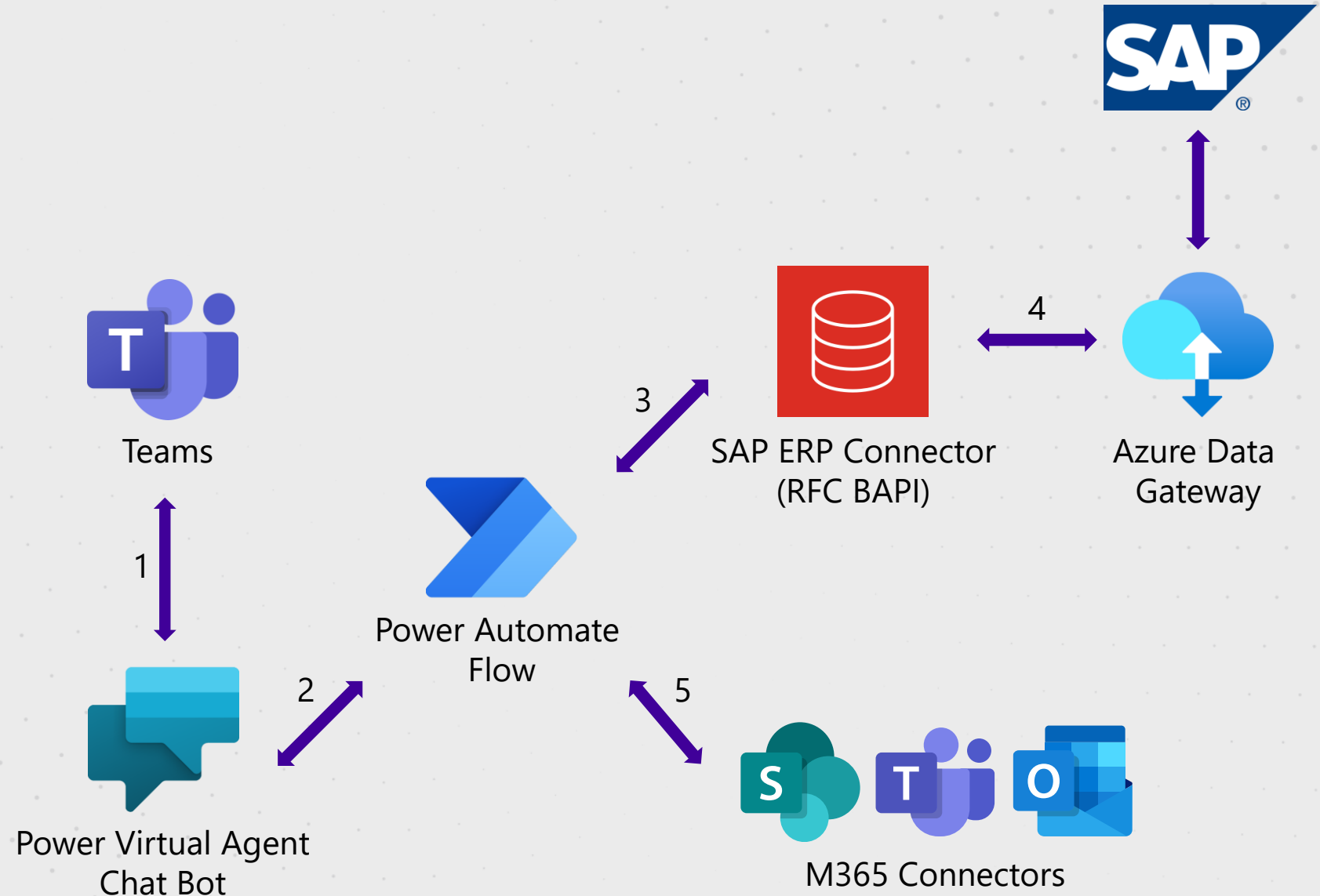
Demo 1

Pinned

Nestor Wilke (You) — 3/28
You: Need info from SAP

SAP Product Lookup — 3:33 AM
To continue to run this bot, please fix the bot so...

Create Leave Request — 2:06 PM
Your request for Vacation has been created in th...

SAP Interactions — 3:06 PM
Sent a card

FlightDemoBot — 2:17 PM
Sent a card

SAPSalesAssistant — 9/15
The sales order was placed with document numb...

Recent

Power Automate — 2:17 PM
SQL Output: FLDATE,NUM_FLIGHTS "20230628",...

Lookup Products from SAP — 3:33 AM
To connect with a person now, click on the follo...

SAP Product Lookup Bot — 9/11
Sorry, I am not able to find a related topic. Can yo...

Lidia Holloway — 7/18
You: I have a prospect asking about HT-1010 ... ca...

Produkte — 6/25
Sent a card

Trident Sales Readiness Live Show (Opti... — 6/17
Unknown: Sending same message as an image as...

Adele Vance — 3/20
You: Thanks

SAP Interactions   Chat   About

| 1 | 2 | 3 | 4 |

restart — 3:06 PM

SAP Interactions 3:06 PM

Is there anything else to do?

| Yes | No |

Yes — 3:06 PM

SAP Interactions 3:06 PM

Ok. Let's carry on.

Hi, I'm a virtual agent and can help with the following SAP related activities:

1. User management
2. Maintenance communication
3. Check Job status
4. To chat with SAP data use the FlightDemoBot

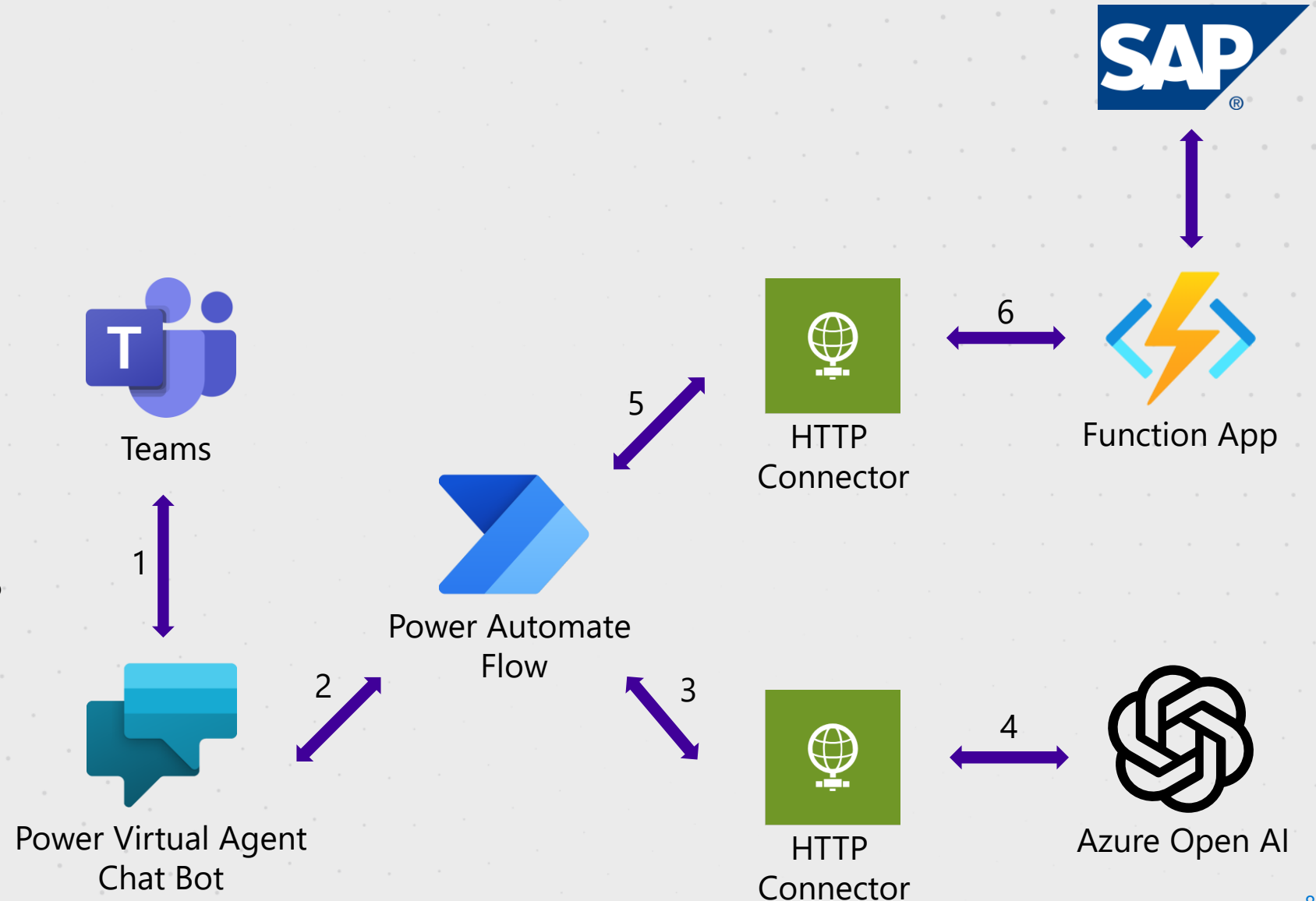| 1 | 2 | 3 | 4 |

Type a message...

Leverage Azure OpenAI to have a conversation with your SAP data.

HAVE A CONVERSATION WITH YOUR SAP DATA.
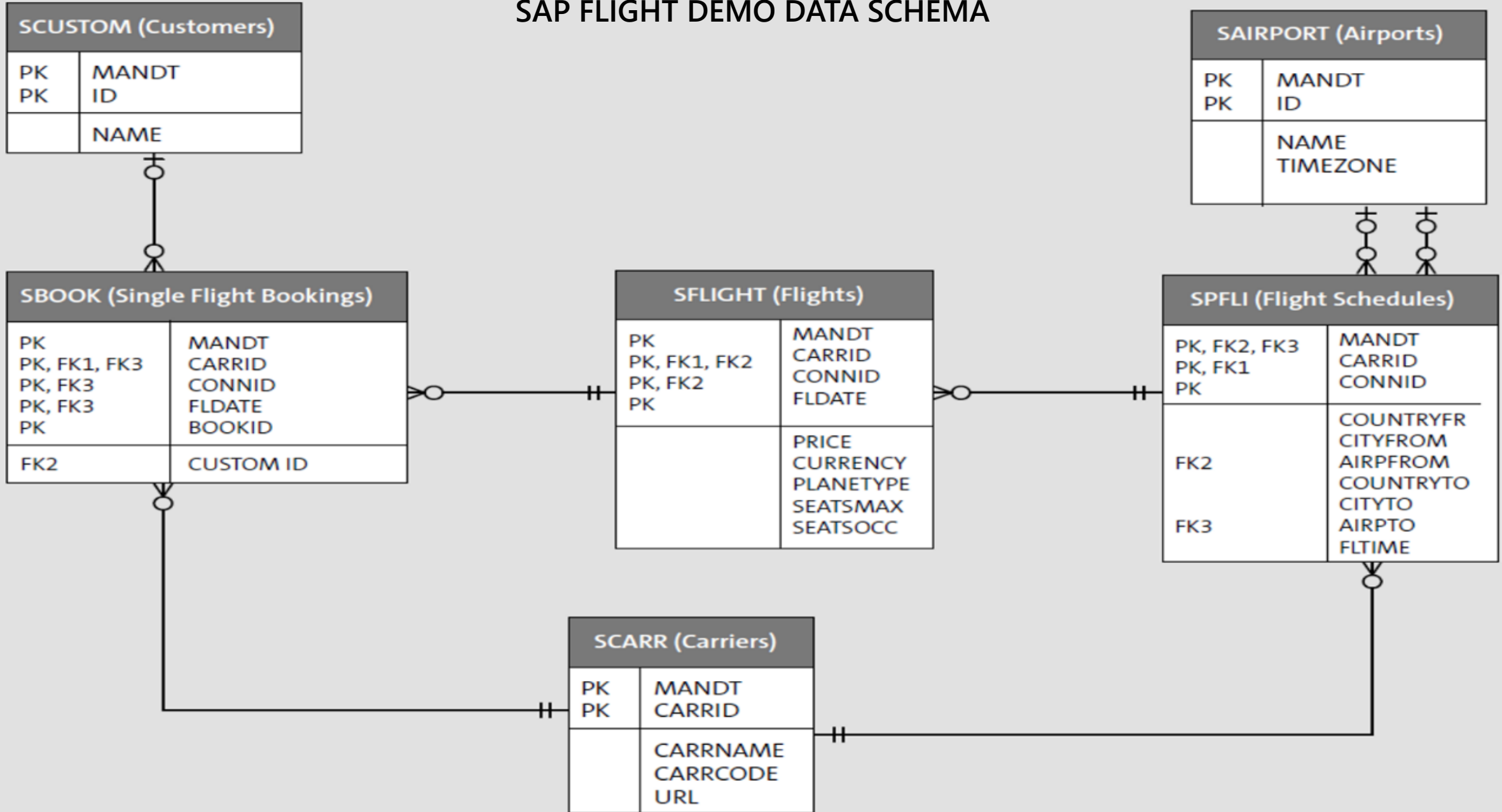
ARCHITECTURE

1. A Teams chat triggers the PVA bot and receives further info from the user

2. The PVA bot calls the flow

3. The flow runs a HTTP action that calls OpenAI chat

4. OpenAI gets the question, with instructions including the DB schema and returns the SQL command along with explanations

5. The Flow triggers via another HTTP connector a Function App with the SQL as parameter

6. The Function App runs the SQL directly on the HANA DB and the results is pushed to Teams as adaptive card

Teams

Power Virtual Agent Chat Bot

Power Automate Flow

HTTP Connector

HTTP Connector

Function App

Azure Open AI

1

2

3

4

5

6

Demo 2

SAP FLIGHT DEMO DATA SCHEMA

SCUSTOM (Customers)

PK	MANDT
PK	ID
	NAME

SAIRPORT (Airports)

PK	MANDT
PK	ID
	NAME
	TIMEZONE

SBOOK (Single Flight Bookings)

PK	MANDT
PK, FK1, FK3	CARRID
PK, FK3	CONNID
PK, FK3	FLDATE
PK	BOOKID
FK2	CUSTOM ID

SFLIGHT (Flights)

PK	MANDT
PK, FK1, FK2	CARRID
PK, FK2	CONNID
PK	FLDATE
	PRICE
	CURRENCY
	PLANETYPE
	SEATSMAX
	SEATSOCC

SPFLI (Flight Schedules)

PK, FK2, FK3	MANDT
PK, FK1	CARRID
PK	CONNID
	COUNTRYFR
	CITYFROM
FK2	AIRPFROM
	COUNTRYTO
	CITYTO
FK3	AIRPTO
	FLTIME

SCARR (Carriers)

PK	MANDT
PK	CARRID
	CARRNAME
	CARRCODE
	URL

Source: What Is SFLIGHT and the Flight and Booking Data Model for ABAP? (sap-press.com)

Chat

ConversationWithMySAPData · 2:19 PM
Sent a card

SAP Interactions · 9/25
To connect with a person now, click on the follo...

ConversationWithMySAPData · Chat · About

Today · 2:18 PM

restart

Last read

ConversationWithMySAPData · 2:18 PM

Welcome to the SAP Flight Demo Data Information Bot! I'm here to assist you in extracting valuable insights from the flight demo data with utmost precision and efficiency.
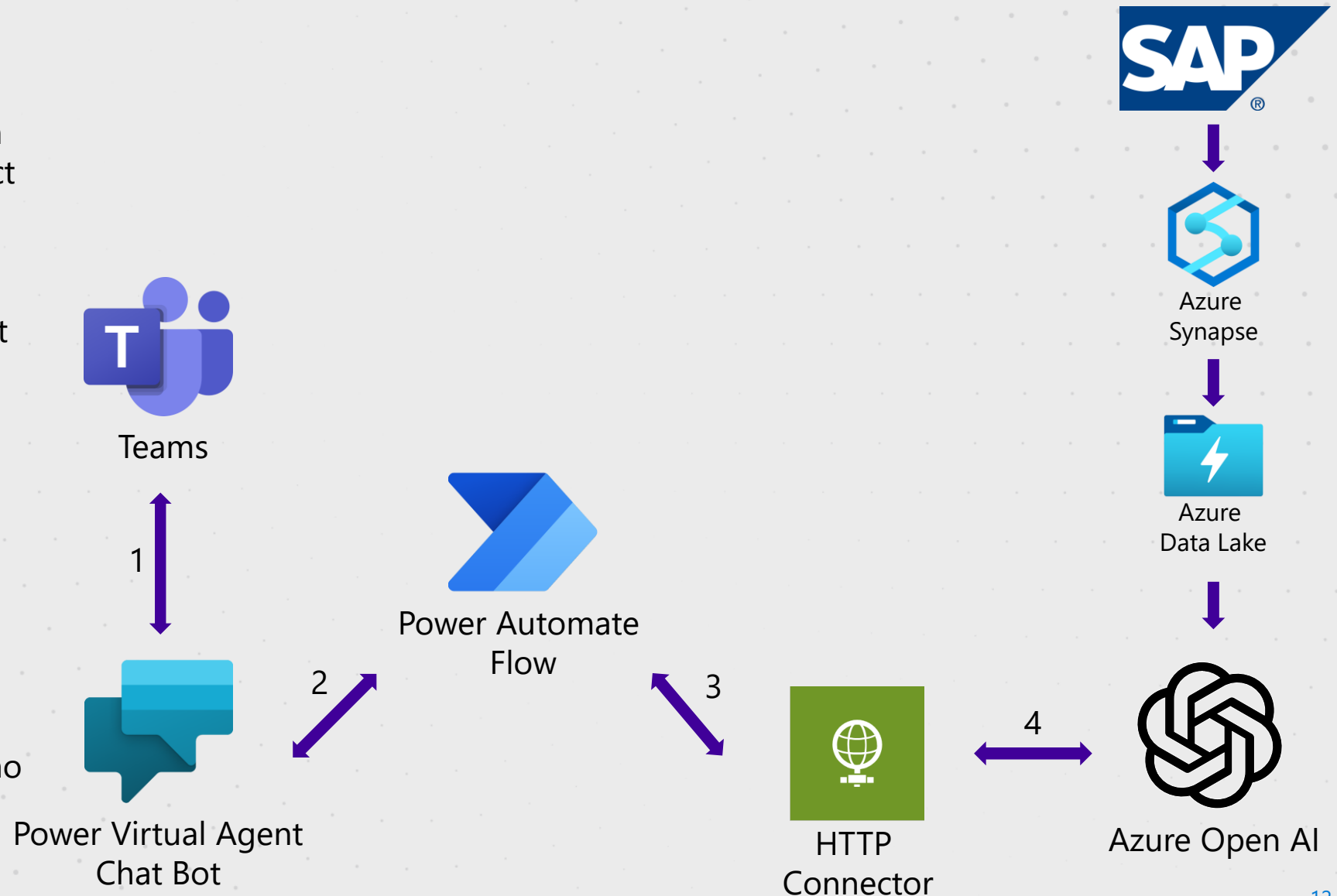
Which model should be used?

gpt-3.5-turbo   gpt-4

2:19 PM

restart

ConversationWithMySAPData · 2:19 PM

Welcome to the SAP Flight Demo Data Information Bot! I'm here to assist you in extracting valuable insights from the flight demo data with utmost precision and efficiency.

Which model should be used?

gpt-3.5-turbo   gpt-4

Type a message...

Chat

Shifts

Teams

Activity

Developer ...

Chat with ...

Power BI

Apps

Help

Search

NEXT STEP: ASK DIRECTLY ABOUT SAP DATA BYPASSING SQL

The SAP data is replicated into an Azure data lake. OpenAI has direct access, no SQL layer required.

1. A Teams chat triggers the PVA bot and receives further info from the user

2. The PVA bot calls the flow

3. The flow runs a HTTP action that calls OpenAI chat

4. OpenAI has direct access to the data which is replicated near real time using the CDC Connector*, no SQL needed in between
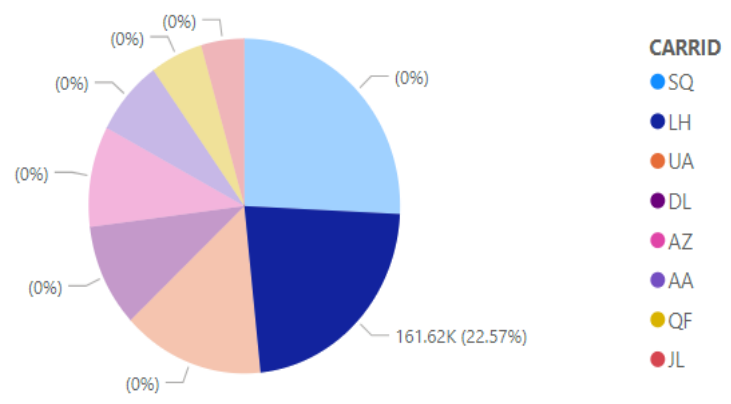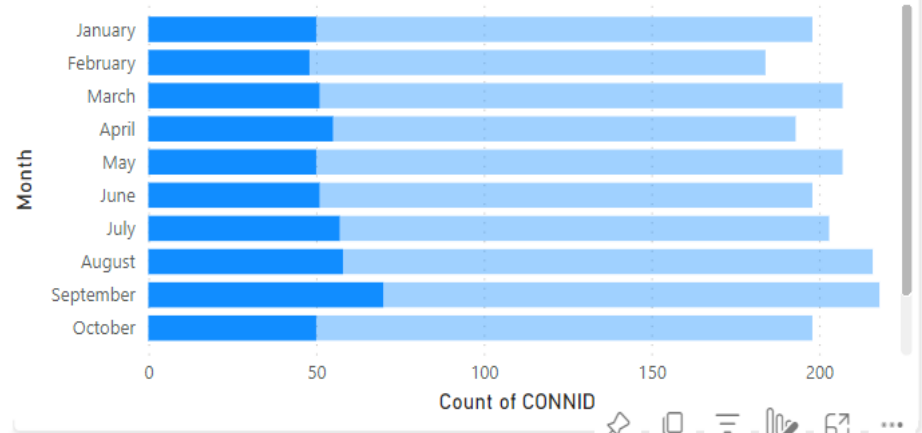
Teams

Power Virtual Agent
Chat Bot

Power Automate
Flow

HTTP
Connector

Azure Open AI

SAP

Azure
Synapse

Azure
Data Lake

1

2

3

4

12
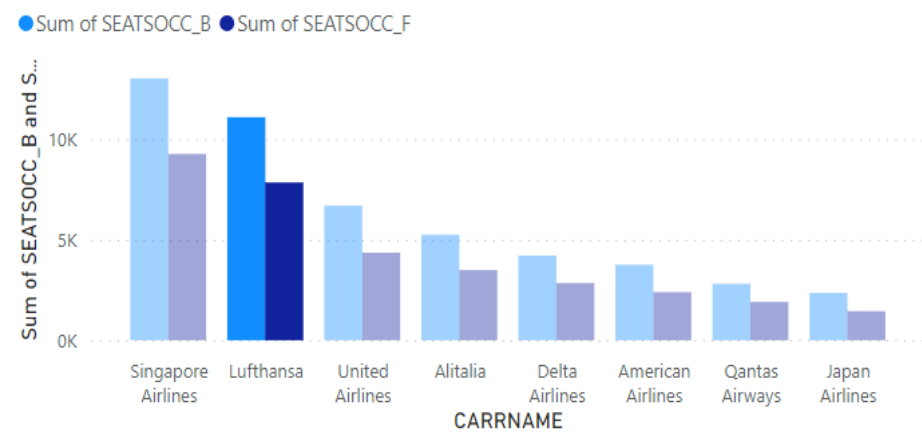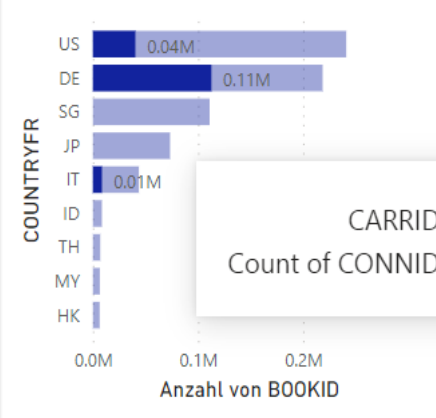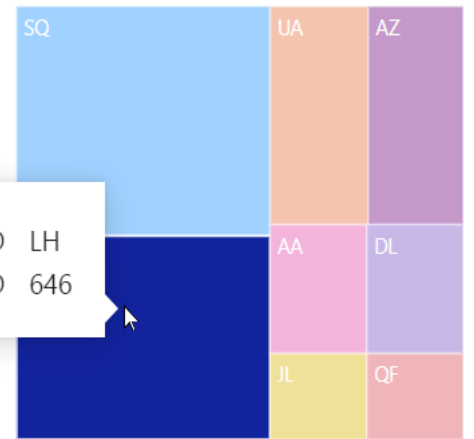
ADDITIONAL RESOURCES

#157 - The one with SAP, Teams, Power and AI - Internship @ Microsoft (Noopur Vaishnav) | SAPonAzure – YouTube

#156 - The one with the AI SDK for ABAP (Gopal Nair) | SAP on Azure Video Podcast – YouTube

#149 - The one with SAP, Azure Open AI and Power Virtual Agent (Michael Mergell) | SAP on Azure - YouTube

#119 - The one with Updates to the SAP CDC Connector (Ulrich Christ) | SAP on Azure Video Podcast - YouTube

FOLLOW-UP

Are you ready to take your SAP data analysis to the next level?

Imagine being able to ask any question about your SAP data!

Create effortlessly SQL queries from natural language, thanks to the power of OpenAI.

With this innovative solution, you can unlock deeper insights and make more informed decisions based on your SAP data.

- We don't want to stop there - we want to hear from you!

- What use-cases can you think of?

Let's explore the possibilities and create a tailored solution that meets your unique needs.

Contact me today to start the conversation and take the first step towards revolutionizing your SAP data analysis.

Michael Mergell | LinkedIn

michael.mergell@microsoft.com

Thank you!

Session Title: Konversation mit Ihren SAP Daten

https://aka.ms/AzSum-S024