

Changing the way how we interact with data

Marc Lelijveld



A big thank you to our amazing partners

sogeti
Part of Capgemini

webdashboard

plainwater
de kracht van heldere data

iqbs

**KASPAROV
FINANCE & BI**

Kimura

S Sifters

creates.

valcon

Tabular Editor

**GET
RESPONSIVE**

**9Δ nine
altitudes**

**ONE
PORTAL**

ilionx
experts in eenvoud

DATAKINGDOM

POWERBI WHITE LABEL
.COM

**DE DATA
GENERATIE**

**THE
DATA
COOKS**

mountdata
guide to impact

sopra steria

Boom Insights
DATA-DRIVEN DECISION MAKING

dexs

dashData
power to your people

raedt-BI

easydash

MINOVA
Management Information Consulting

SIGNON
ICT TRAININGEN +

**ANOTHER
DIMENSION**
YOUR PORTAL TO DATA CLARITY

Fabri Code </>

**Azurro
Finance**

**Power BI
Connector**
by DAVITA

Quanto
collective analytics

Thanks

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Data-Marc.com



DutchFabricUsergroup.com

FAVORITE STUFF:



Without **data**...

there is no **AI**

Set a proper foundation for your data platform!

Nobody wants to build a
house on quicksand, right?





Microsoft Fabric

The unified data platform for AI transformation



Data
Factory



Analytics



Databases



Real-Time
Intelligence



Power BI



Industry
Solutions



Partner
workloads



AI



OneLake



Microsoft Purview

Fabric capabilities.

Data
Movement

Data Lakes

Data
Engineering

Data
Integration

Data
Science

Real-Time
Analytics

Business
Intelligence

Automated
Actions

Personas

Customer

Financial Advisors

Portfolio Managers

...

Modern Technology

Co-pilot / Chatbot

Predictions

Data Management Platform



Fabric

Platforms

Digital Experience

CRM & ERP

Document Management

...

But...

What if you could **chat** with your data?

The Battle!

Is Copilot the way to go or should we consider alternatives like AI Skills?

What can you conclude from the orders placed versus the orders shipped?





Demo: Q&A in Power BI

AI in Fabric.



Data
Factory



Analytics



Databases



Real-Time
Intelligence



Power BI



Industry
Solutions



Partner
workloads



AI



OneLake



Microsoft Purview

“ IF THE ONLY TOOL YOU HAVE IS A HAMMER,
IT IS TEMPTING TO TREAT EVERYTHING
AS IF IT WERE A NAIL ”

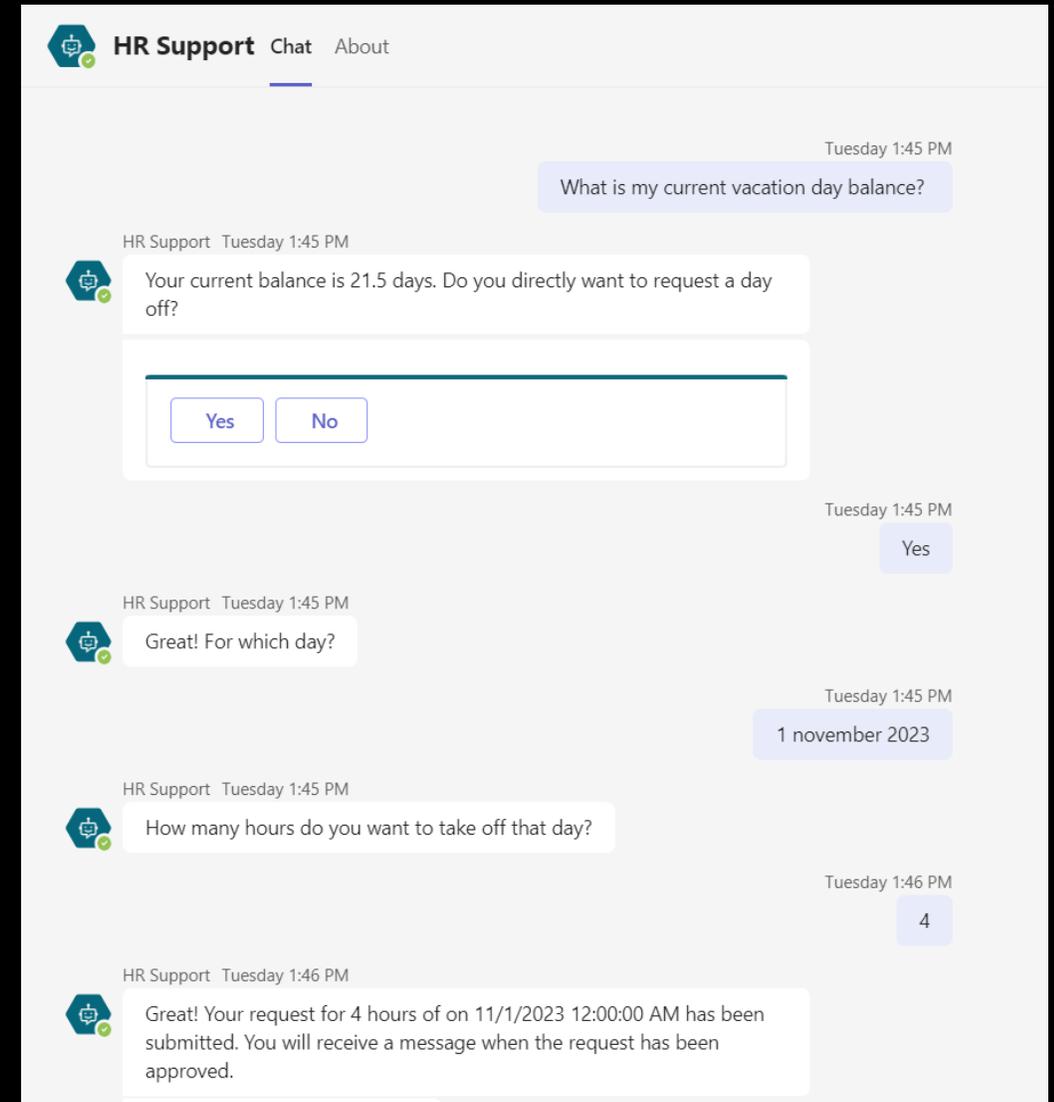


**Should we hammer it
with Copilot?**

Image from: <https://x.com/Vaccinologist/status/1622620533706588161>

What if you could chat with your data?

- Combining the world of Power Platform with Microsoft Fabric – your data management platform
- Experience inside Teams
- Security by design
- Real time updates



The screenshot shows a chat window titled "HR Support" with "Chat" and "About" tabs. The chat history includes:

- A user message at 1:45 PM: "What is my current vacation day balance?"
- An HR Support bot response at 1:45 PM: "Your current balance is 21.5 days. Do you directly want to request a day off?" with a form containing "Yes" and "No" buttons.
- A user response at 1:45 PM: "Yes"
- An HR Support bot response at 1:45 PM: "Great! For which day?"
- A user response at 1:45 PM: "1 november 2023"
- An HR Support bot response at 1:45 PM: "How many hours do you want to take off that day?"
- A user response at 1:46 PM: "4"
- An HR Support bot response at 1:46 PM: "Great! Your request for 4 hours of on 11/1/2023 12:00:00 AM has been submitted. You will receive a message when the request has been approved."

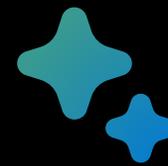
Copilot in Fabric.



Copilot accelerated
experiences



AI-driven
insights



Custom
generative AI
for your data

Copilot in Fabric.

Public Preview



Data Factory

Get intelligent code generation to transform data with ease and code explanations to help you better understand complex tasks.

Public Preview



Data Warehouse

Write and explain T-SQL queries, or even make intelligent suggestions and fixes while you are coding.

Public Preview



Data Engineering & Data Science

Quickly generate code in Notebooks to help work with Lakehouse data and get insights.

Public Preview



Databases

Write and explain T-SQL queries, or even make intelligent suggestions and fixes while you are coding.

GA



Real-Time Intelligence

Translate questions into KQL queries that you can execute.

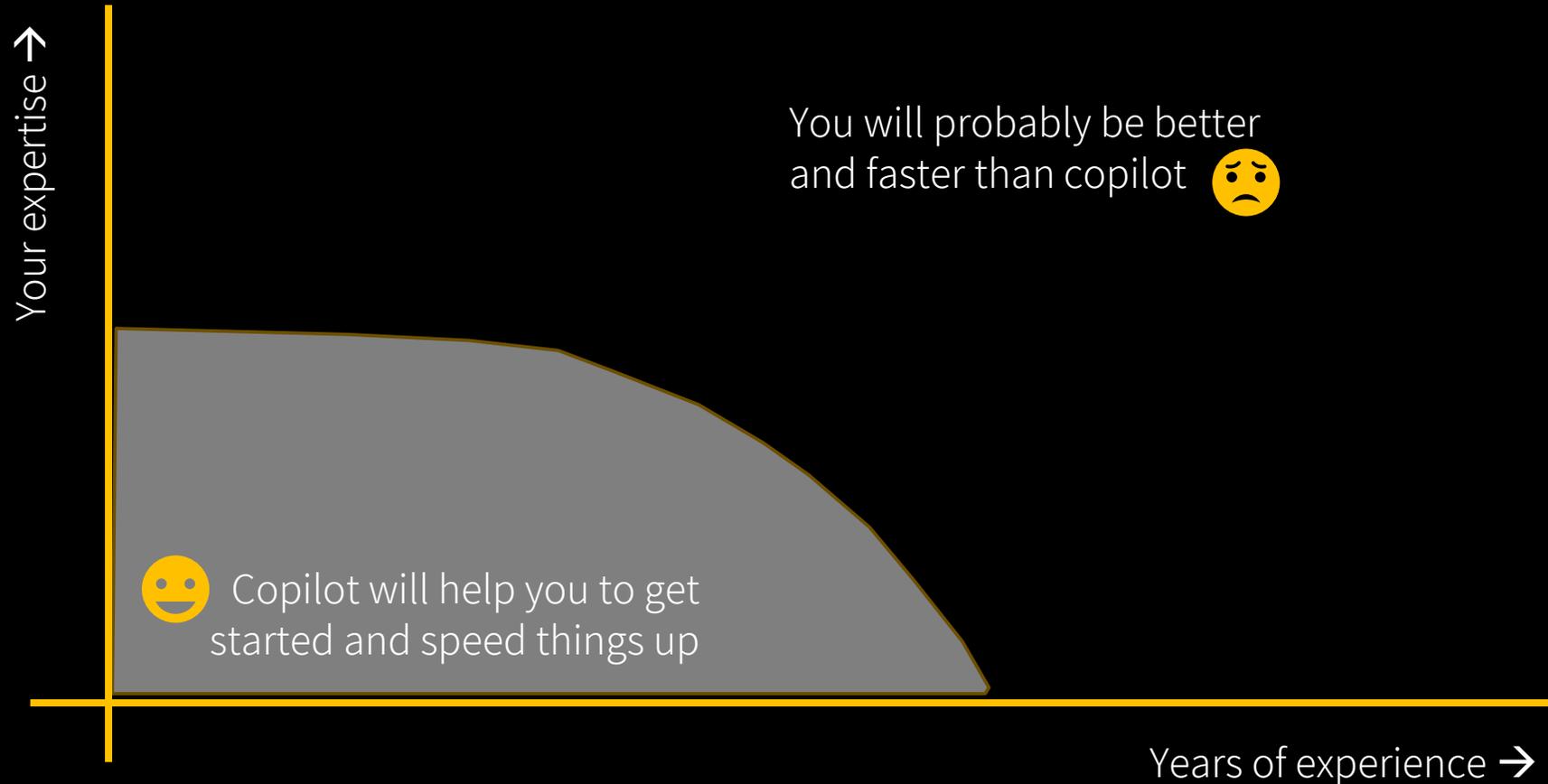
GA



Power BI

Quickly create report pages, natural language summaries, and generate synonyms.

Who is copilot for?





Demo: Copilot in Power BI

Copilot-Internet-Sales-AW | Confidential\Microsoft Extended

File View Reading view Mobile layout Open data model

Internet Sales Analysis by Product Category and Geography

Count of Category: 4 | Count of EnglishCountryRegionName: 6 | Sum of SalesAmount: 29.36M | Revenue % of Sales: 41%

Sum of SalesAmount by EnglishCountryRegionName (Bar chart)

Sum of SalesAmount by Category, Sub-Category and EnglishProduct Name (Bar chart)

Sum of SalesAmount by EnglishCountryRegionName (Map)

Sum of SalesAmount by EnglishPromotionType (Bar chart)

Sum of SalesAmount (Pie chart)

Visualizations | Data

Copilot Preview

Suggest content for this report

OK, here's a suggested outline for your report. Select any page topic to view details and start creating pages.

Spending per Trip per Person

Season: All | Island Name: All

Spending per trip (PP)

\$1.45K

Arrivals per month

947.84K

Spending per trip (PP) by Month

Month	Spending per trip (PP)
Jan 2016	\$1,641.61
Jul 2016	\$1,399.17
Jan 2017	\$1,721.16
Jul 2017	\$1,365.94
Jan 2018	\$1,731.58

Spending per trip (PP) by Island Name

Island Name	Spending per trip (PP)
Maui	\$1,750.45
Kaua'i	\$1,428.66
Lana'i	\$1,377.93
Hawa'i Island	\$1,366.73
O'ahu	\$1,351.11
Moloka'i	\$570.22

Ask a question about your data

Try one of these to get started

- what is the average trip length by month season
- top trip purposes by number of months

Spending per trip per person (PP) refers to the average amount of money that a single individual spends during their trip. Data shows Maui as the island with the highest spending per trip at **\$1.75K**, which is 206.98% higher than Moloka'i, the island with the lowest spending per trip at **\$570.22**.

An analysis of the spending per trip trend from January 1, 2016, to May 1, 2018, shows an overall decrease of 11.95%. However, there's an upward trend starting on October 1, 2017, which saw spending per trip rise by 1.34% in 7 months.

Looking at the monthly breakdown, the highest spending per trip was in January 2018, standing at **\$1.74K**. This suggests that visitor spending can vary depending on the period of the year.

Created with AI. Inaccuracies are possible. [Read terms](#)

Copilot Preview

break down tourism spending by place of origin

Showing region and expenditures.

Expenditures by Region

US West | US East | Other | Japan

how much are people from Japan spending in just Maui?

Showing expenditures where region is Japan and island name is Maui.

\$1.51bn Expenditures

Describe the report you want to create or ask a question

AI Skills.

1. Using LLMs to interact with your data
2. Query your data using natural language
 - NL2SQL
 - NL2KQL
 - NL2DAX
3. Have a conversational experience
4. Connect up to 5 data sources

AI Skills.

Deliver custom generative AI experiences for **your data** with **AI Skill**



Allow your users to talk to data in Fabric



Create, curate and configure a **data expert** on your data domain

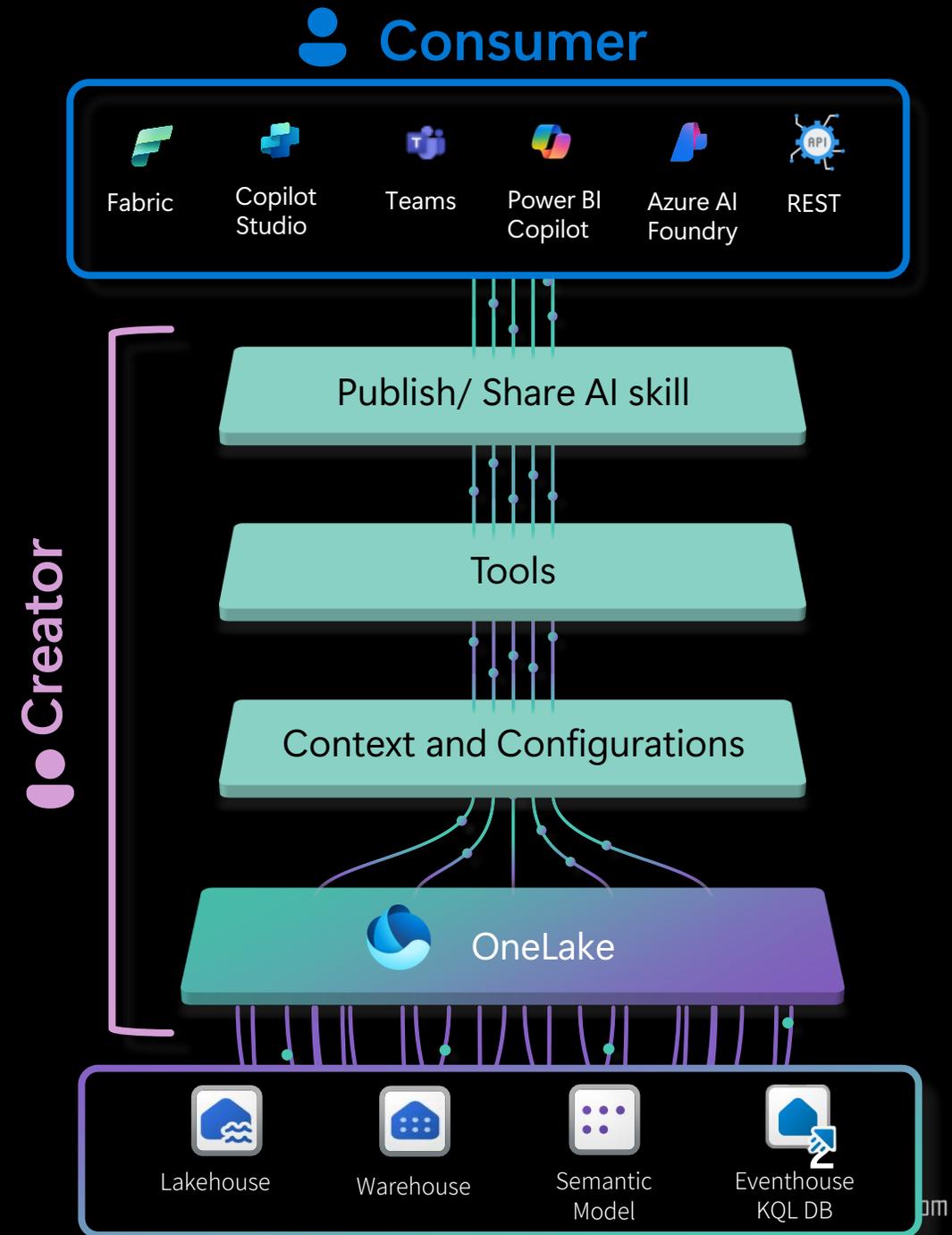


Share AI skills with other creators and consumers in Fabric

Name	Type	Task	Owner	Refreshed	Next refresh	Endorsement	Sensitivity	Included in app
Contoso_Sales_LH	Lakehouse	—	Admin user	—	—	—	—	
Contoso_Sales_LH	Semantic mo	—	Fabric AI	8/28/24 3:53:0	N/A	—	—	

AI Skills.

-  The **conversational AI skill** allows users to interact with data naturally, enhancing accessibility and usability.
-  Improved chat canvas for creators with **new debugging capabilities**, making it easier to understand and refine responses.
-  Seamlessly reason over multiple data sources, including **semantic models and Eventhouse KQL databases**, to create a powerful Data Expert tailored to your data domain.
-  Your Data Agent can be consumed inside and outside of Fabric. Stay tuned for **upcoming integrations** with Copilot Studio, Teams, Azure AI Foundry and your own custom applications.



Understanding the **interface** of AI Skills.

Connected lakehouse tables

Home

ChatWithYourData

Search

AI instructions

Example queries

Clear chat

Publish

Revert to published version

Explorer

Data source

sampledata

dbo

- customer
- date
- product
- sales

Customer

OrderDate

OrderQuantity

Product

SalesAmount

SalesOrder

ShipDate

Store

AI instructions

Help the AI skill understand your data by writing a detailed system prompt.

If you plot something over time, always use OrderDate. When I ask about anything sales, it is most likely about money so please format it as money. Also, make sure you round it by zero decimal places. An order is not shipped if the ShipDate is empty for all order lines.

1 step completed

Step 1. analyze_database

Restated question

Show sales over time with a specific breakdown including the country the customers are from

Query code and output

OrderDate	SalesAmount	Country
2020-09-29 00:00:00	8.99	Germany
2020-10-29 00:00:00	65.94	Germany
2020-11-06 00:00:00	29.99	Germany
2021-10-09 00:00:00	8.99	United States
2021-10-11 00:00:00	34.99	Germany
2022-10-11 00:00:00	4.99	Germany
2020-11-06 00:00:00	9.99	Germany
2021-11-06 00:00:00	4.99	Germany
2022-11-20 00:00:00	19.96	United States
2022-11-21 00:00:00	9.98	Germany

```
Sql
SELECT s.OrderDate, s.SalesAmount, c.Country
FROM [dbo].[sales] s
JOIN [dbo].[customer] c ON s.Customer = c.CustomerID;
```

Sample questions

Ask a question to test the AI skill's response

271/15000 characters used

Created with AI. Mistakes are possible. Review terms

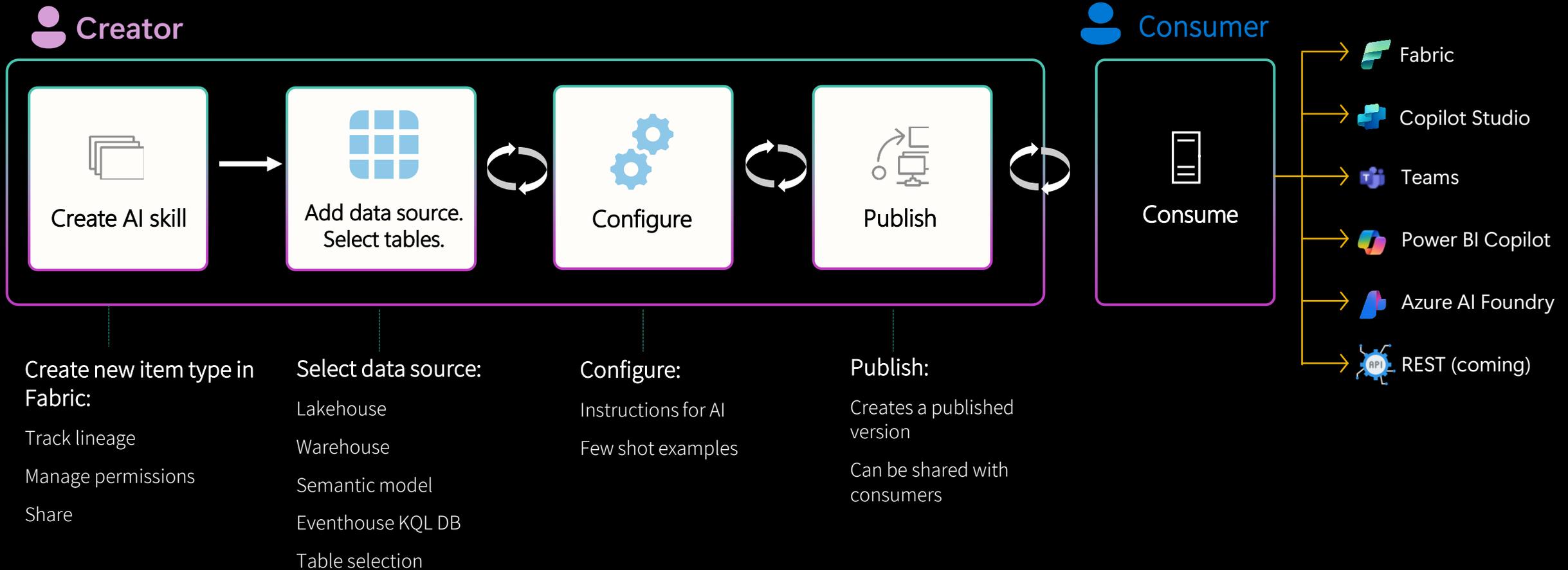
Notes to enrich model

Executed SQL expression

Chat window

Example queries you can enter

AI Skills end-to-end flow.





Demo: AI Skills in Fabric

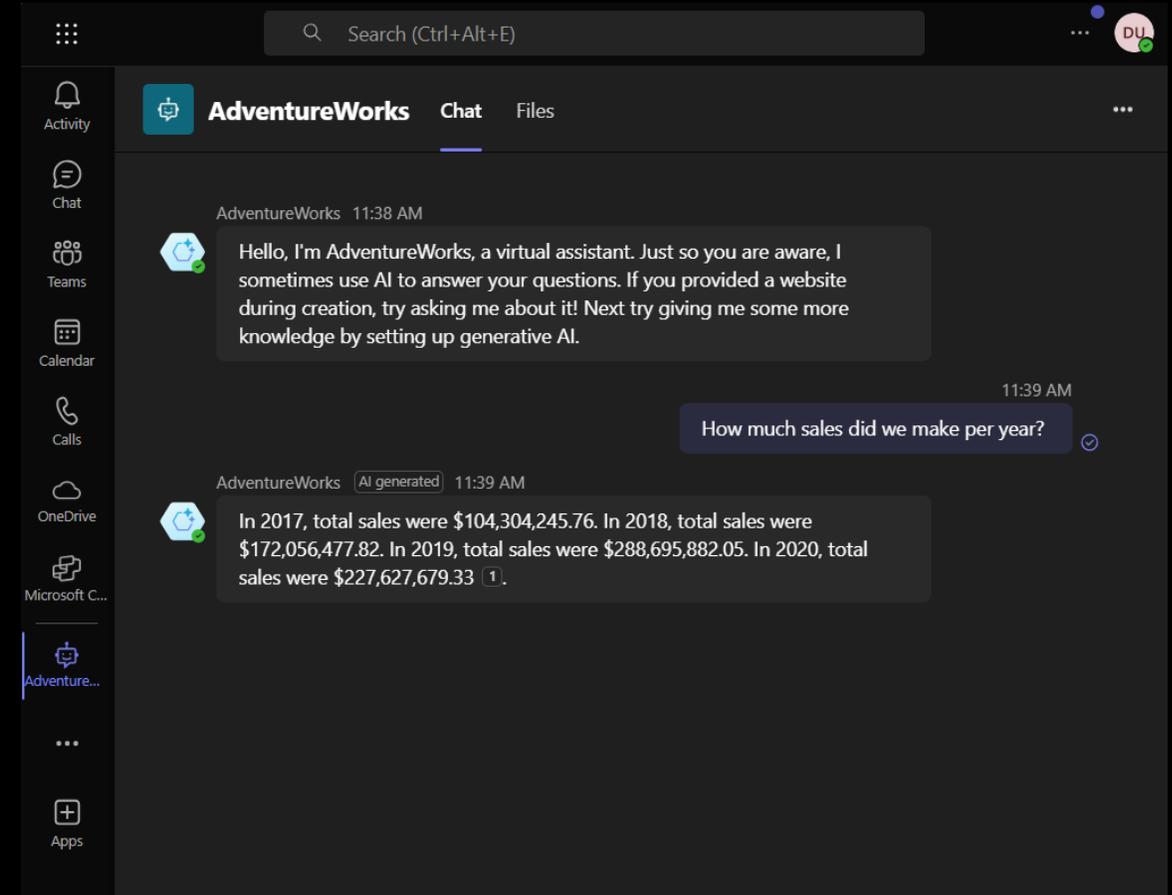
How do users access the **chatbot**?

Cluttering of tools.



How do users access the **chatbot**?

- Integration with CoPilot Studio
- Bring it to the tool we all love to hate (MS Teams)
- Add it as an app to Teams



Recap & gotcha!

AI Skills...

- ...are currently in public preview
- ...require Fabric capacity F64+
- ...only work on structured data
- ...generate NL2SQL, NL2KQL and NL2DAX
- ...loses accuracy if you use large schemas with dozens of tables

Copilot Studio...

- ...has its own licensing structure
- ...results may differ from AI Skills – although connected

Most up to date list of limitations:

<https://learn.microsoft.com/en-us/fabric/data-science/concept-ai-skill>



**LET ME KNOW
WHAT YOU THINK!**



The future is bright!

Ready to start your journey?

Marc Lelijveld

 Data-Marc.com