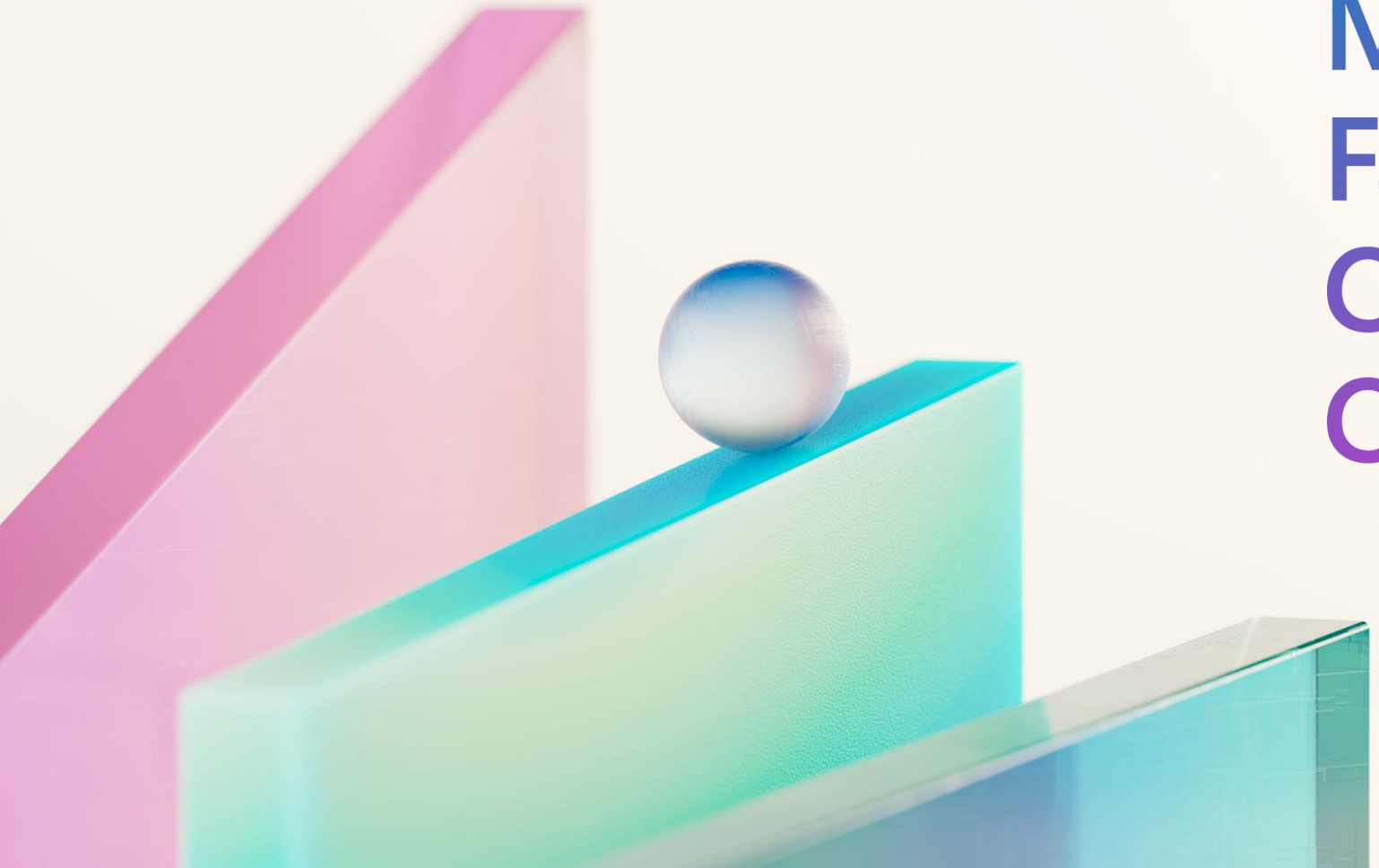
Microsoft



Microsoft Fabric Community Conference

Microsoft

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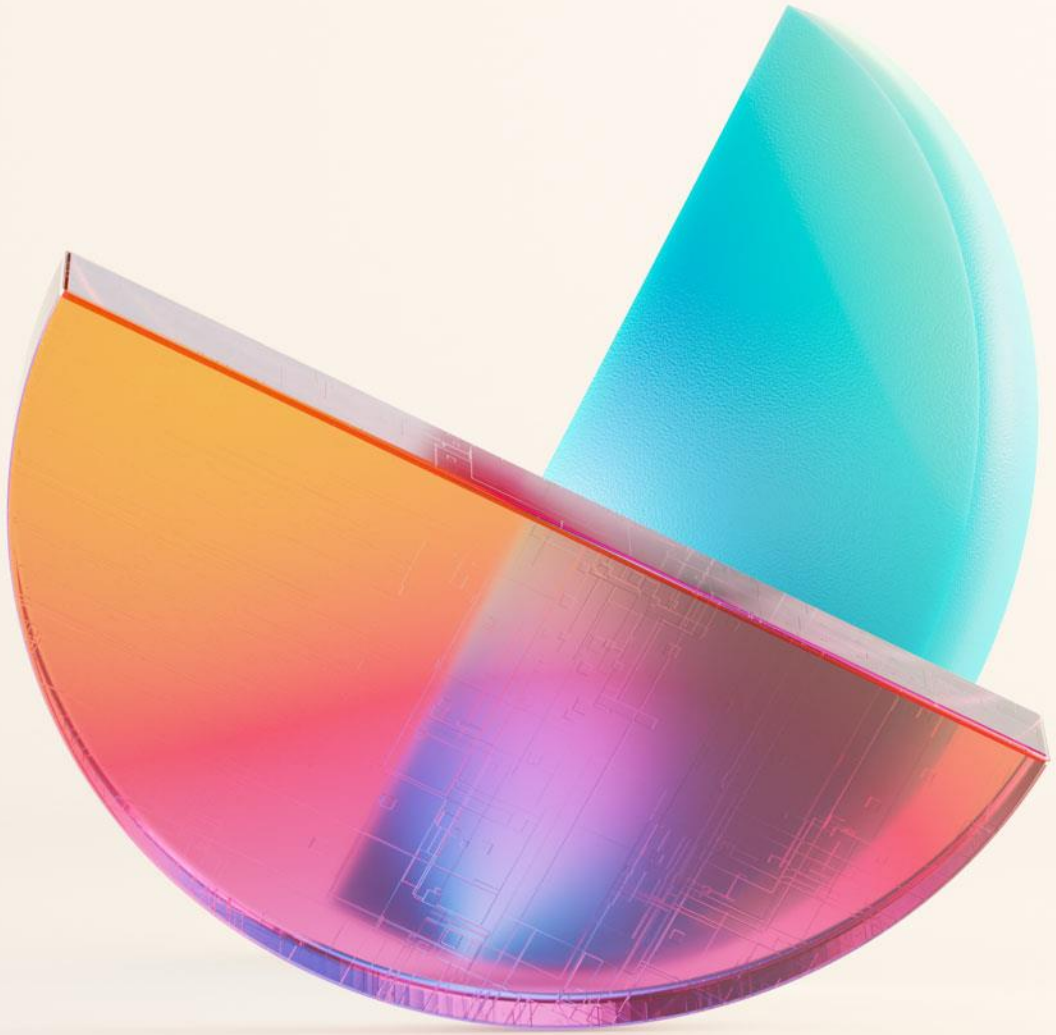

Changing the way how we interact with data

In the Era of AI

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DutchFabricUsergroup.com

FAVORITE STUFF:

Session breakdown

01

Understanding data interaction

02

Setting a proper foundation

03

Data Q&A

04

Copilot experiences

05

Data Agents

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Meet users where they are

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Wrap up

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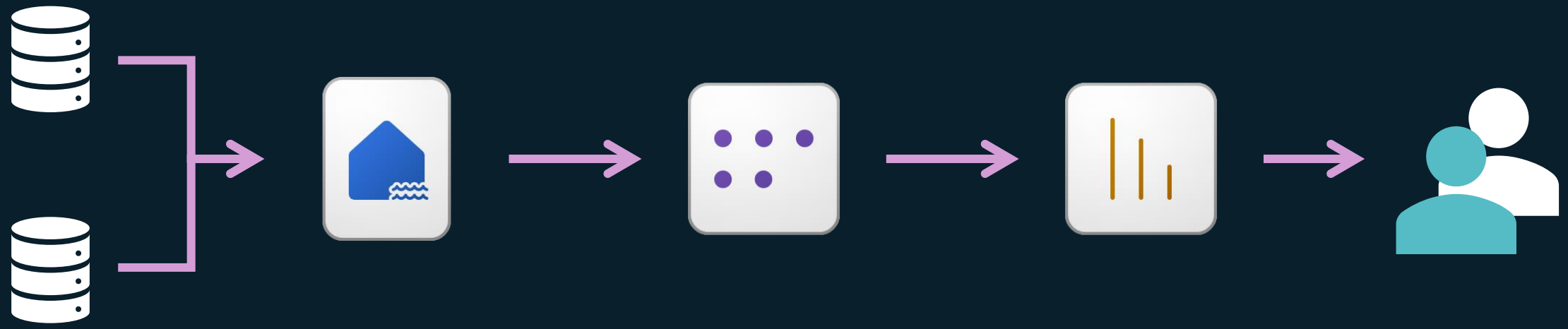
Understanding data interactions

Typical analytics solution today

Simplified overview



Why should I open a report to get to my insights?

What if you could chat with your data?

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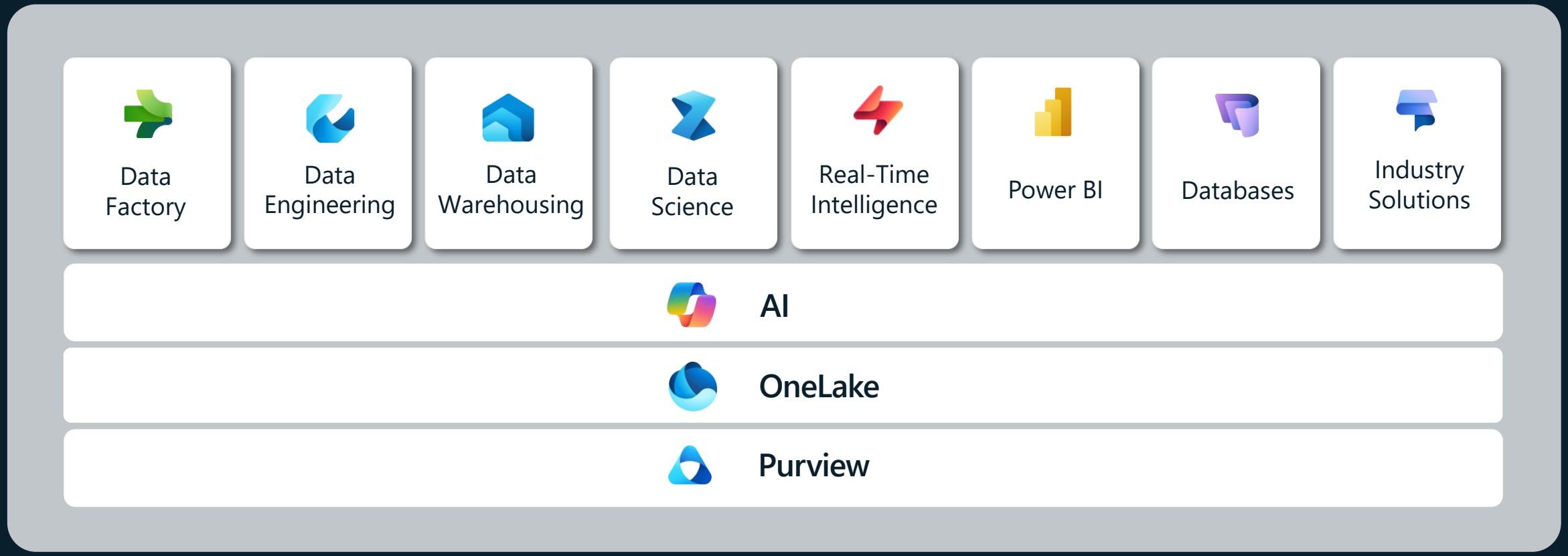
Setting a proper data foundation

Personas	Customer	Financial Advisors	Portfolio Managers	…
Modern Technology	Co-pilot / Chatbot		Predictions	
Data Management Platform	Fabric			
Platforms	Digital Experience	CRM & ERP	Document Management	…

Set a proper foundation!

Cause nobody wants to build a house on quicksand, right?

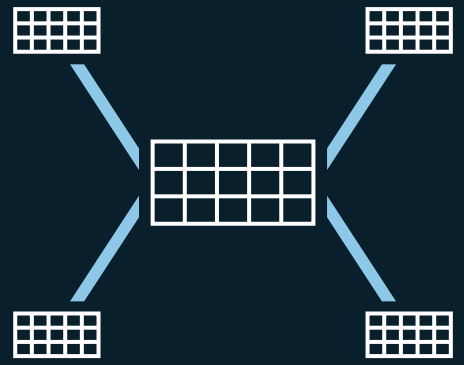
Microsoft Fabric as data foundation



A decent data solution is more important than ever!

Structured platform striving for a single source of truth

Transformation done upstream



Semantics and business logic added

Without data...

there is no AI!

Exploring solution areas
What are the alternatives to copilot?

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

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Power BI Q&A

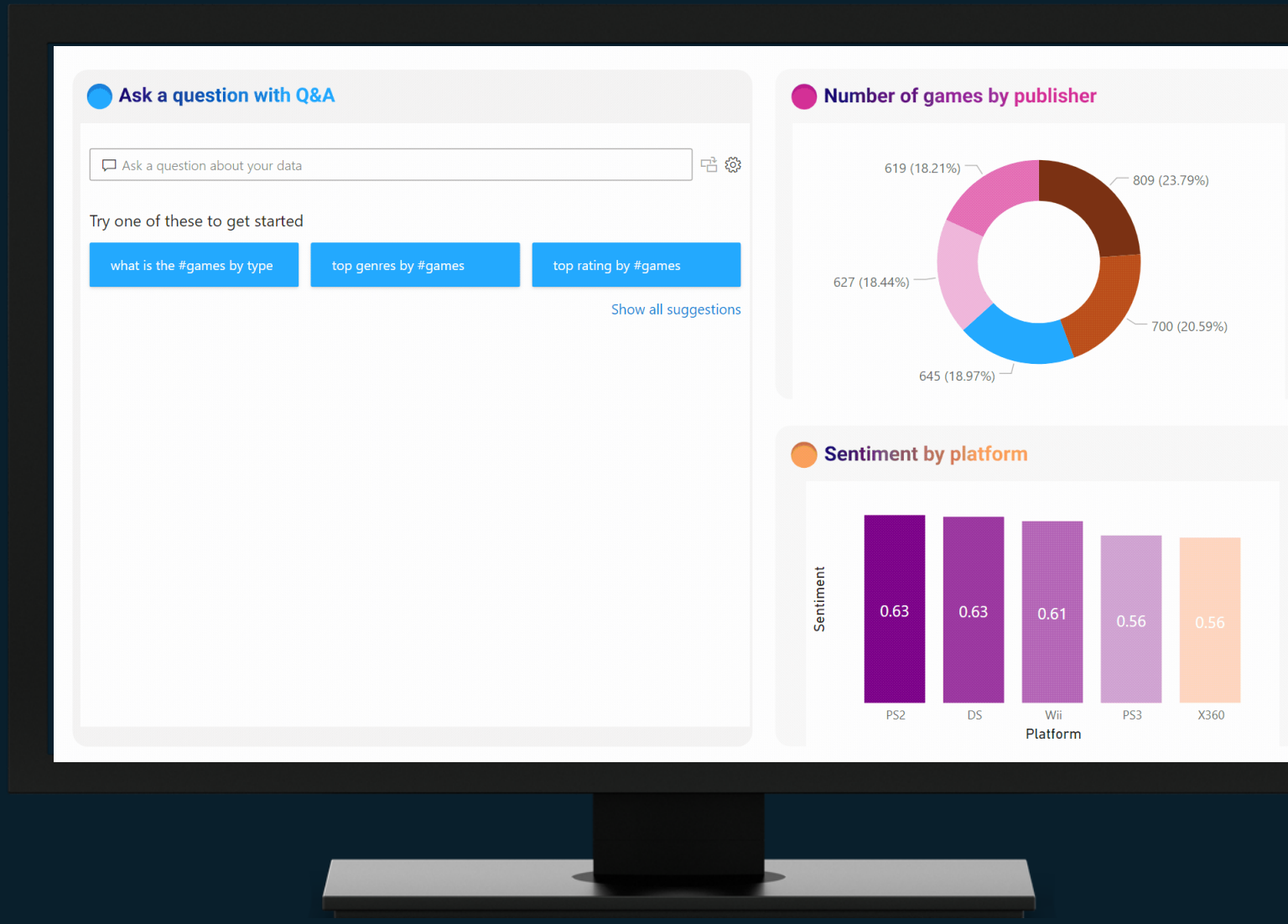
Q&A Visual

Exact string matching between prompt and Semantic Model

Based on:

- Tables
- Columns
- Measures

… other model objects



Q&A training

Overall setup

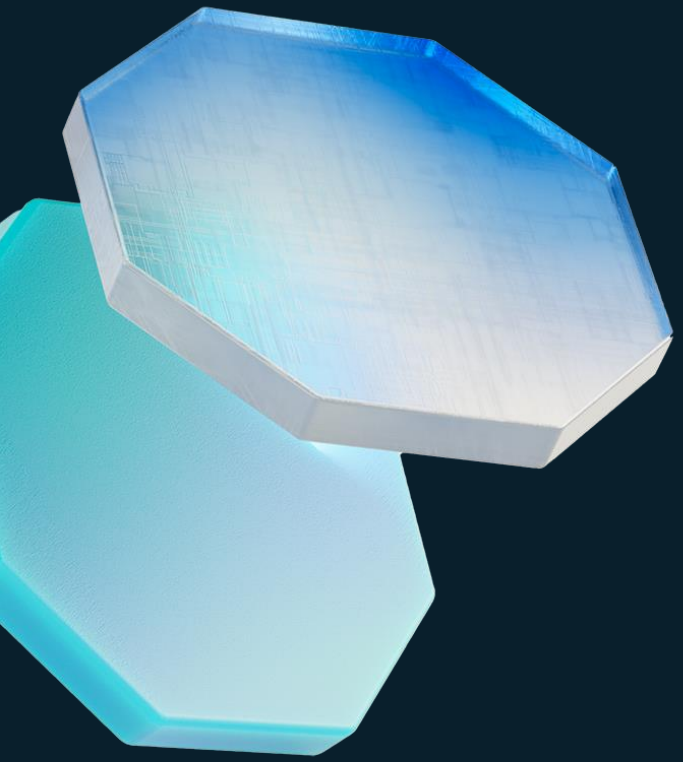
- Training by looking at previous questions & answers from users
- Fields can be excluded from potential answers

Can be enriched by

- (Field) Synonyms & descriptions
- Linguistic schema

JSON Copy

```
product_has_category:
  Binding: {Table: Products}
  Phrasings:
  - Attribute: {Subject: product, Object: product.category}
```



Demo

Q&A visual

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Copilot experiences

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

Should we hammer it with Copilot?

Copilot in Fabric

Which copilot experiences doe we have?

Copilot accelerated experiences

Help me build stuff

AI-driven insights

Summarize and find insights

Custom generative AI for your data

Custom configured and build

Copilot in Fabric
Focused on the different workloads

Data Factory

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

Data Warehouse

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

Data Engineering & Data Science

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

Databases

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

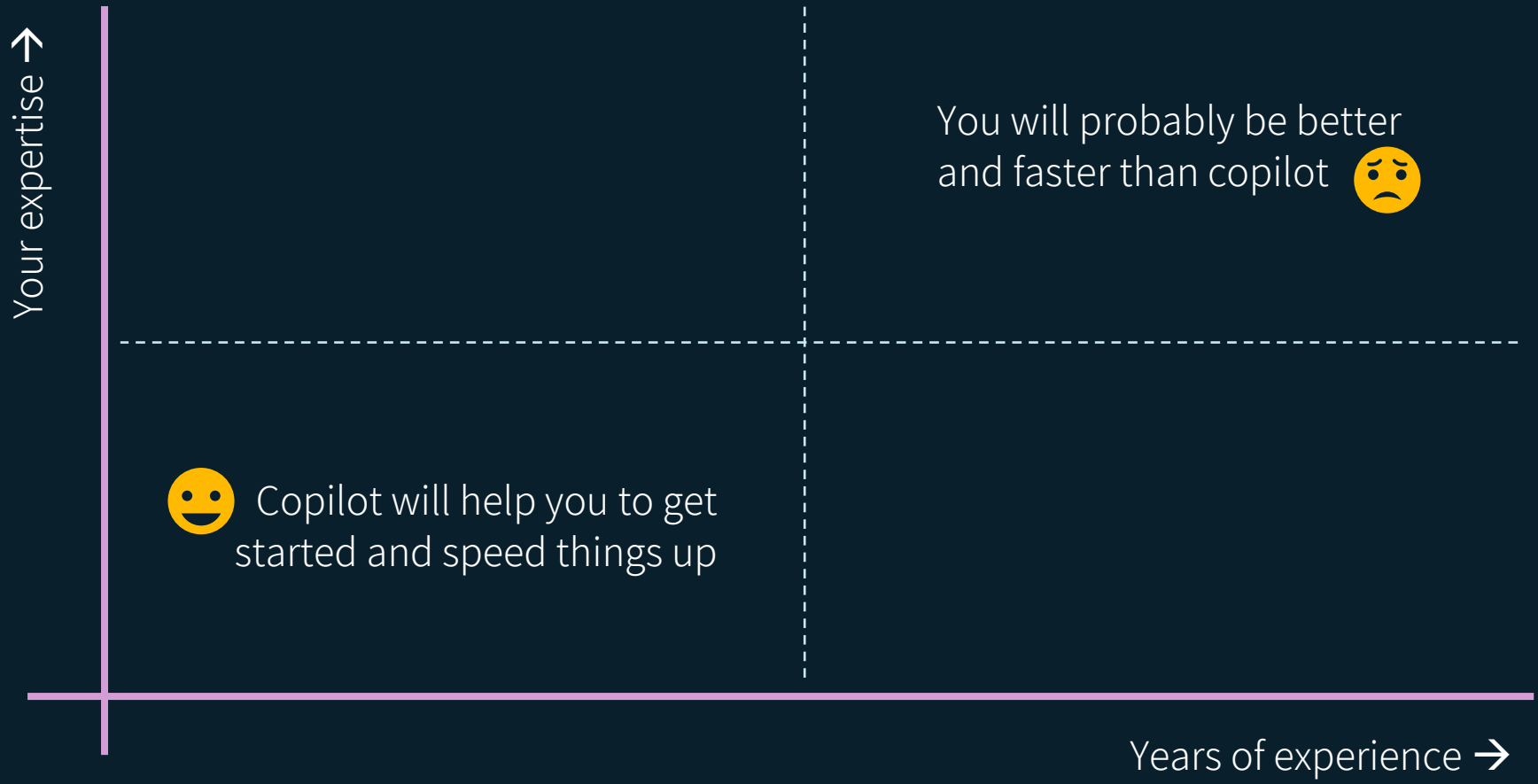
Real-Time Intelligence

Translate questions into KQL queries that you can execute.

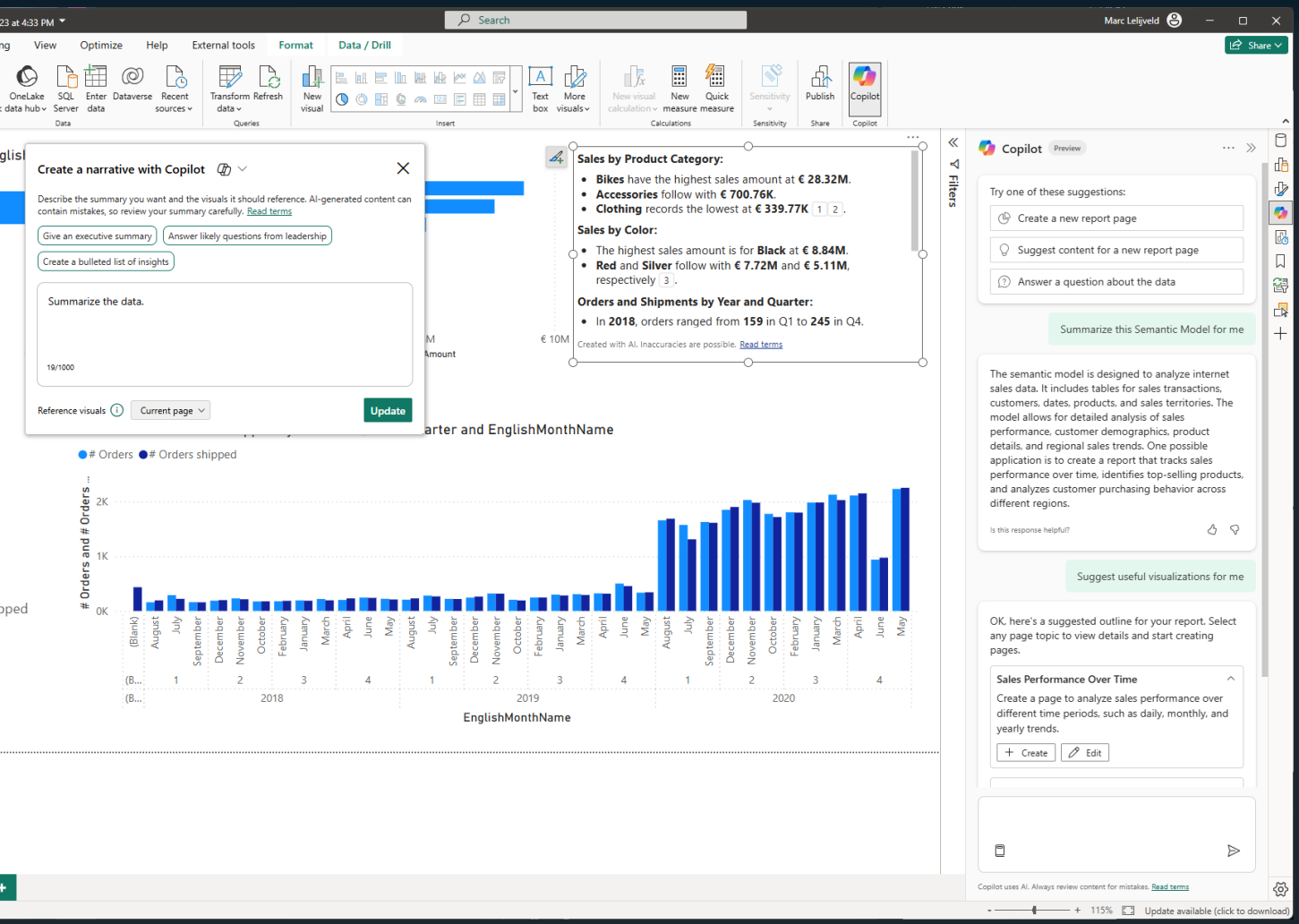
Power BI

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

Who copilot is for



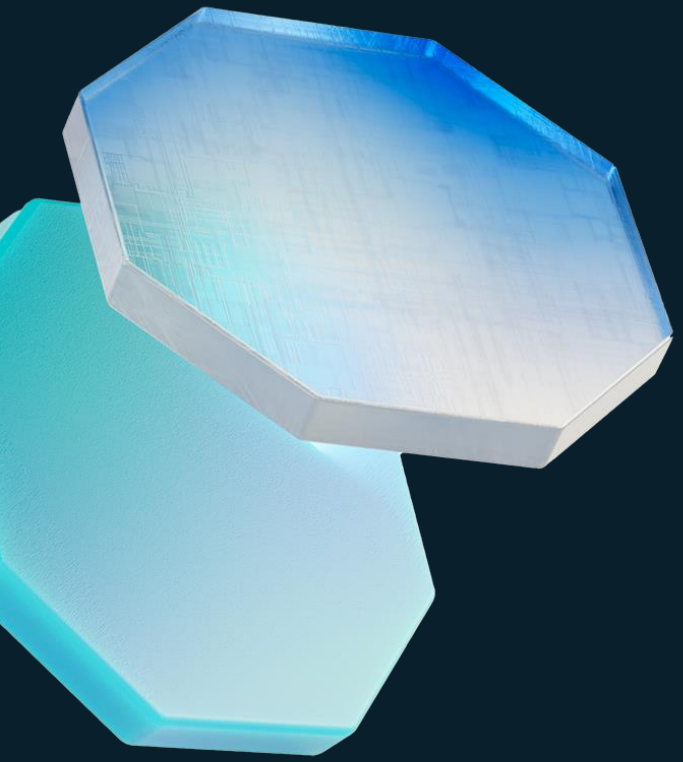
Copilot – Power BI use cases



How can copilot help you

- Summarize semantic model
- Suggest report content
- Create report page
- Create summary visual (Smart narrative)
- Add synonyms to model
- Add descriptions to measures
- Write DAX (& DQV)

... and more!



Demo

Copilot consumer experience

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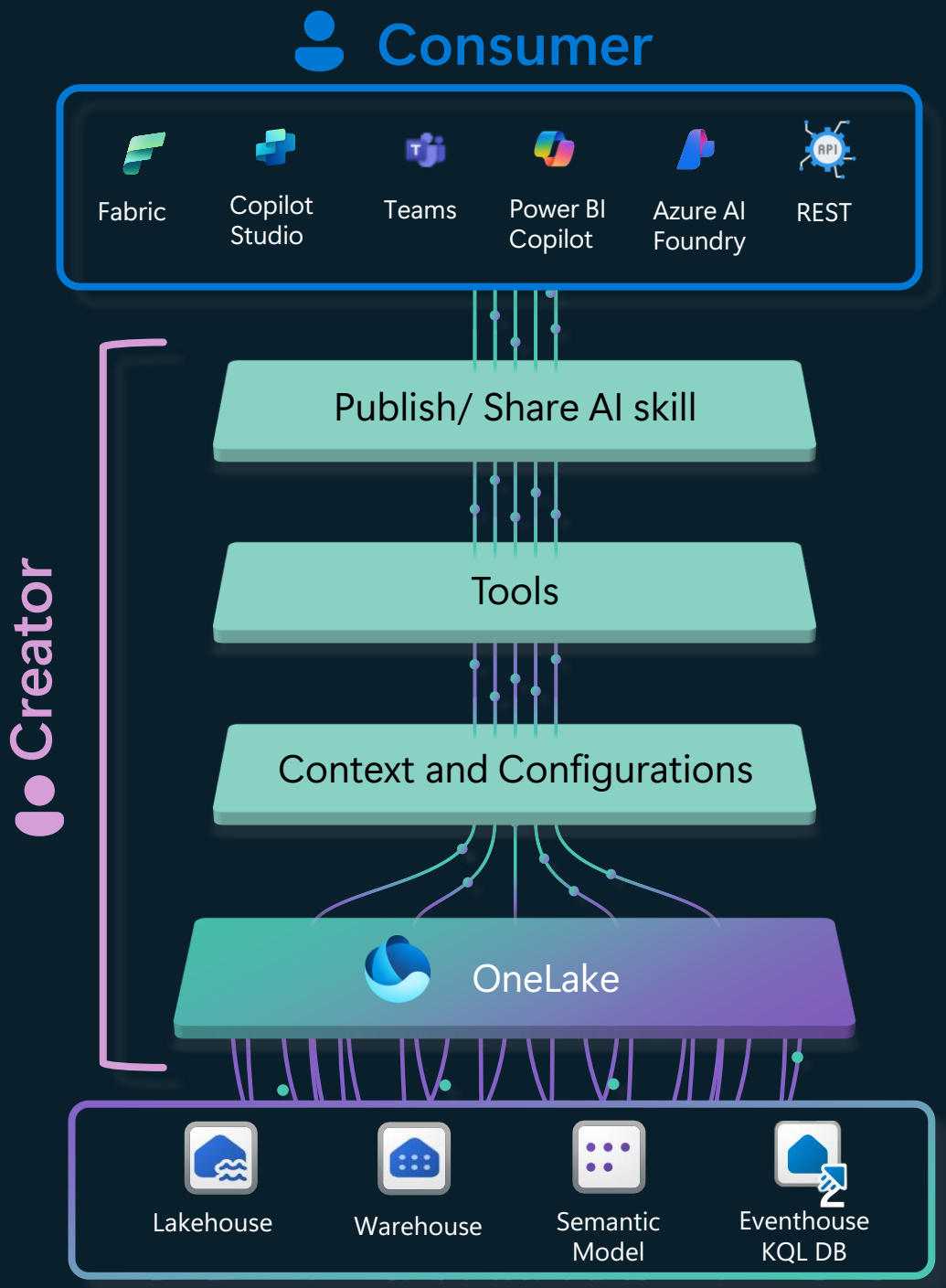
Data Agents

Data Agents

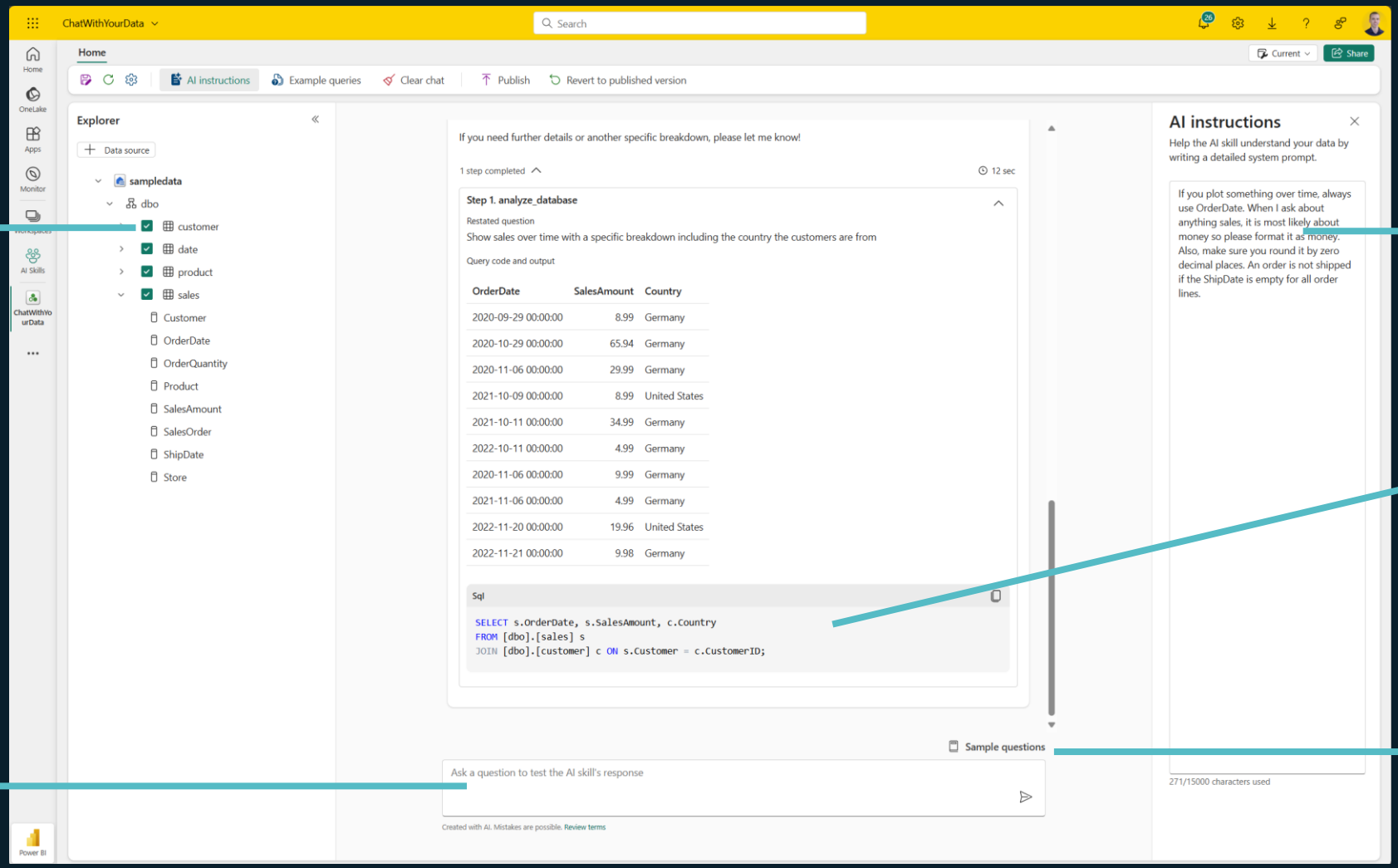
Previously known as AI Skills

Introducing Data Agents

- The **conversational Data Agent** 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 **Lakehouses, warehouses, semantic models and Eventhouse KQL databases**.
- 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 Data Agent creator experience



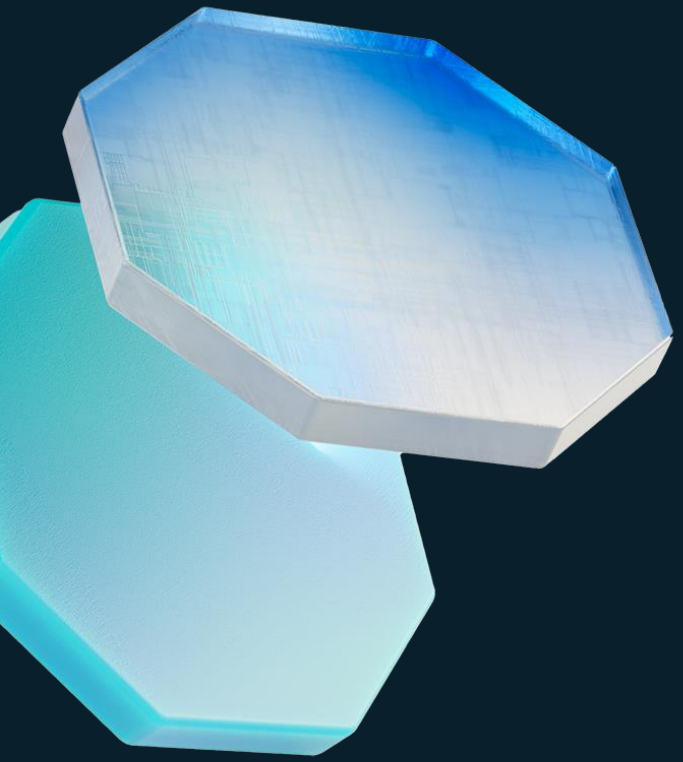
Connected source tables

Chat window

Notes to enrich model

Reasoning for results

Example queries

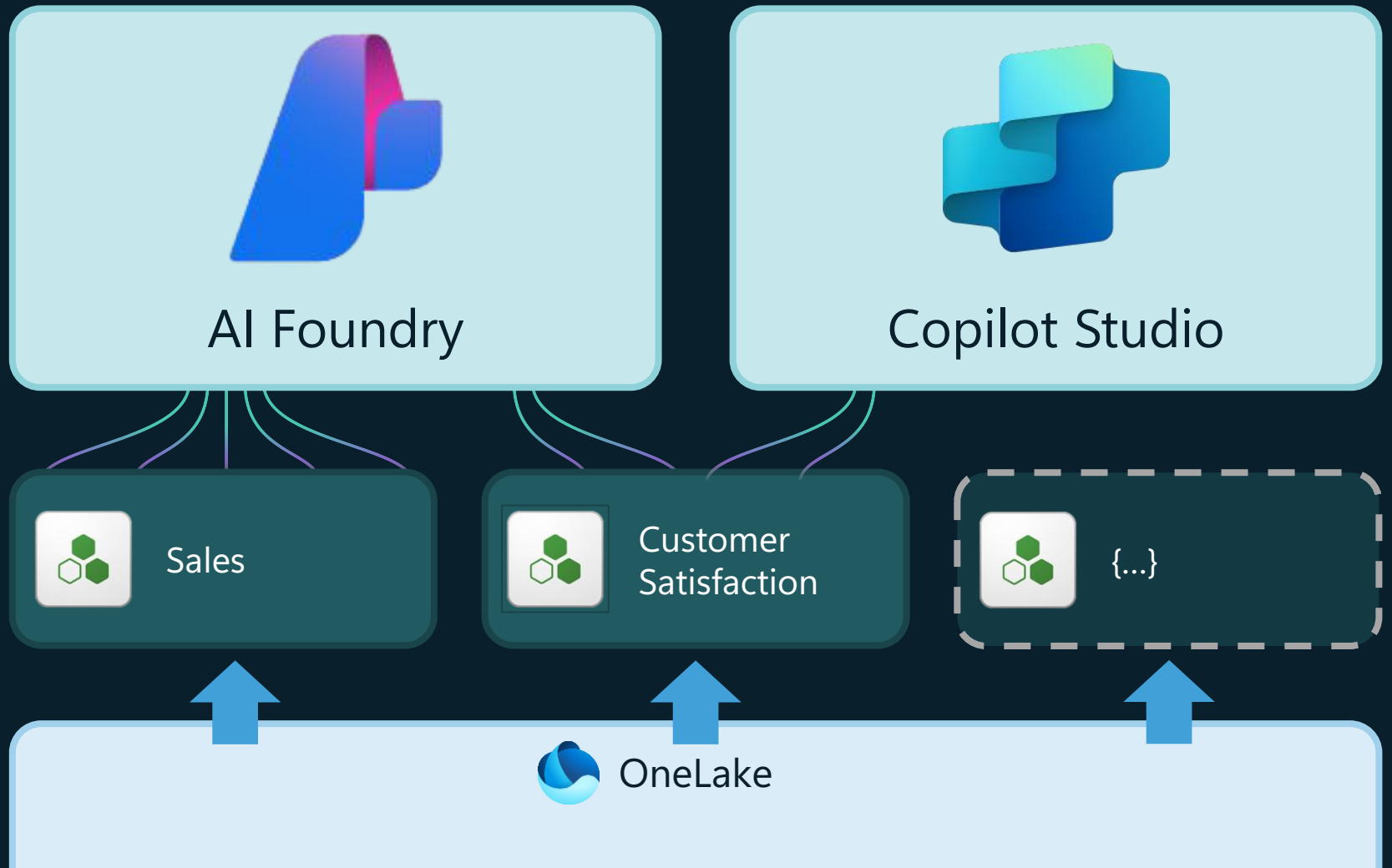


Demo

Data Agents

Agent architecture
One to rule them all?

No!



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Meet users where they are

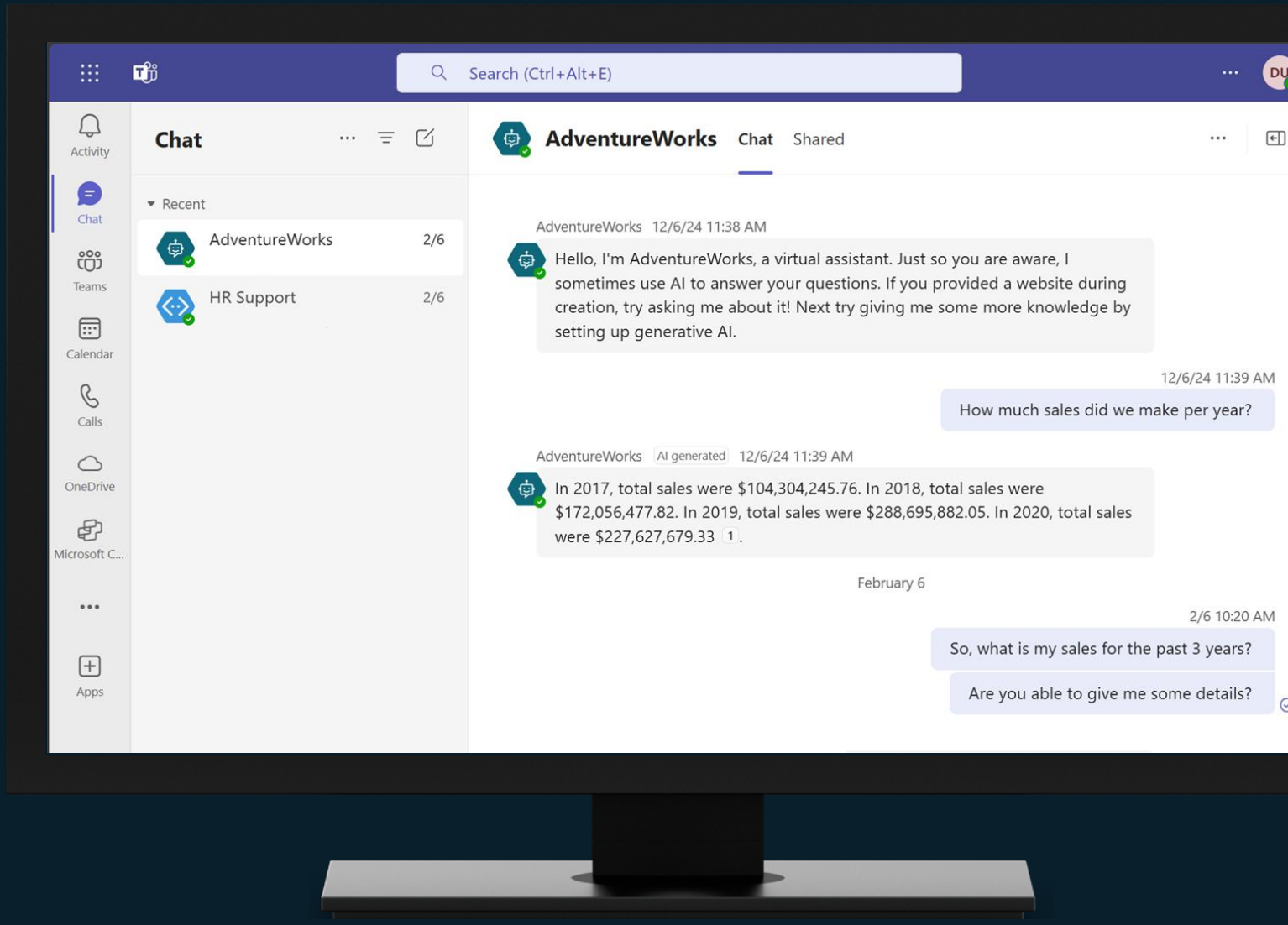
Tools we use day in, day out

Meet users where they are

Using Copilot Studio (Power Platform) to build custom agents to do anything

Use Fabric Data Agents as knowledge base

Integrate the agent into Microsoft Teams



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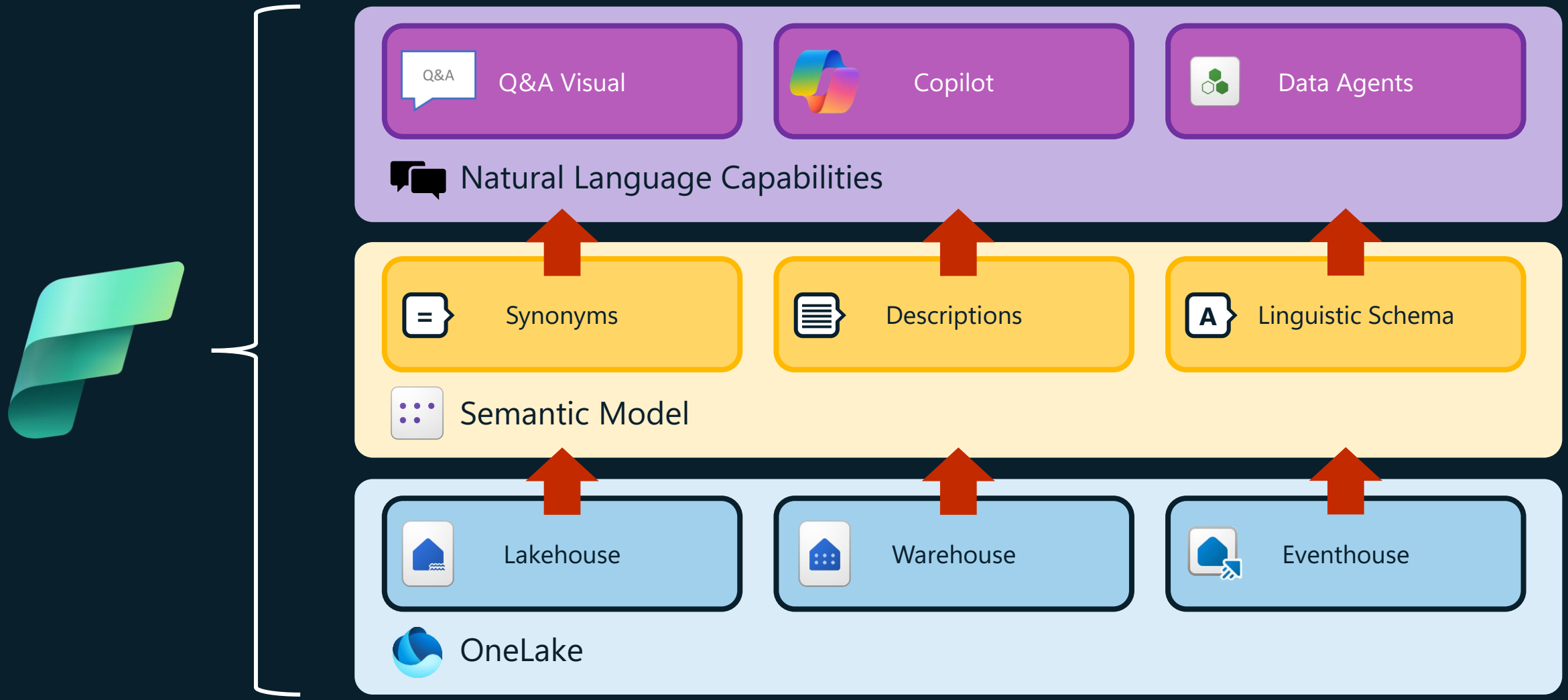
Wrap up & take-aways


Q&A
Q&A Visual
Copilot
Data Agents
Natural Language Capabilities
Synonyms
Descriptions
Linguistic Schema
Semantic Model
Lakehouse
Warehouse
Eventhouse
OneLake

Key take-aways

Building a chat interfaces on top of your data

- A proper data foundation is key!
- Improve answer quality by using Semantic Models – including synonyms, descriptions and the linguistic schema

Data Agents (AI skills) in Fabric

- …allows for customization and training, compared to out of the box copilot
- …only work on structured data
- …generate NL2SQL, NL2KQL and NL2DAX
- …loses accuracy if you use large schemas with dozens of tables

Copilot Studio

- …brings the experience to the users to meet them where they are
- …has its own licensing structure

Most up to date list of limitations:
https://learn.microsoft.com/en-us/fabric/data-science/concept-ai-skill

Other related sessions to check out

Session: The Future Unfolded: Microsoft Fabric for AI and Data Science

Data Science

Tweet | Share | Share | Email

This session is an opportunity to understand the forward momentum of Microsoft Fabric's AI and ML investments. Join us to stay ahead of the curve and learn about the most recent updates, upcoming features, and the strategic roadmap for AI powered data analytics.

PRESENTED BY:

Markus Weimer
Director of Engineering lead, AI
Microsoft Fabric

Nellie Gustafsson
Principal Product Manager
Microsoft

Type
Session

The Future Unfolded: Microsoft Fabric for AI and Data Science
by Markus Weimer, Nellie Gustafsson
(Monday at 3.00 PM)
Boulevard Ballroom 163

Session: Unlocking Data-Driven Insights with AI Skills in Microsoft Fabric and Beyond

Data Science

Tweet | Share | Share | Email

Join this session to learn how to create specialized AI skills, known as Data Experts, to harness the power of generative AI in Microsoft Fabric. You'll see how to tailor these AI Skills to your data and seamlessly integrate them across the Microsoft ecosystem. This session will equip you with practical knowledge to build, deploy, and use Fabric AI skills, transforming your data into a valuable, insight-driven asset across your organization.

PRESENTED BY:

Amir Jafari
Senior Product Manager
Microsoft

Misha Desai
Senior Product Manager
Microsoft

Type
Session

Unlocking Data-Driven Insights with AI Skills in Microsoft Fabric and Beyond
by Amir Jafari, Misha Desai
(Wednesday at 11.15 AM)
Grand Ballroom 113

Microsoft

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Connect with community members, ask questions, and learn more about Fabric

aka.ms/FabricUserGroups
Find a user group that matches your interests in your area or online

aka.ms/SuperUsers
Spread your Fabric knowledge, insights, and best practices with others

aka.ms/MVP
Technology experts that share their knowledge and passion with the community