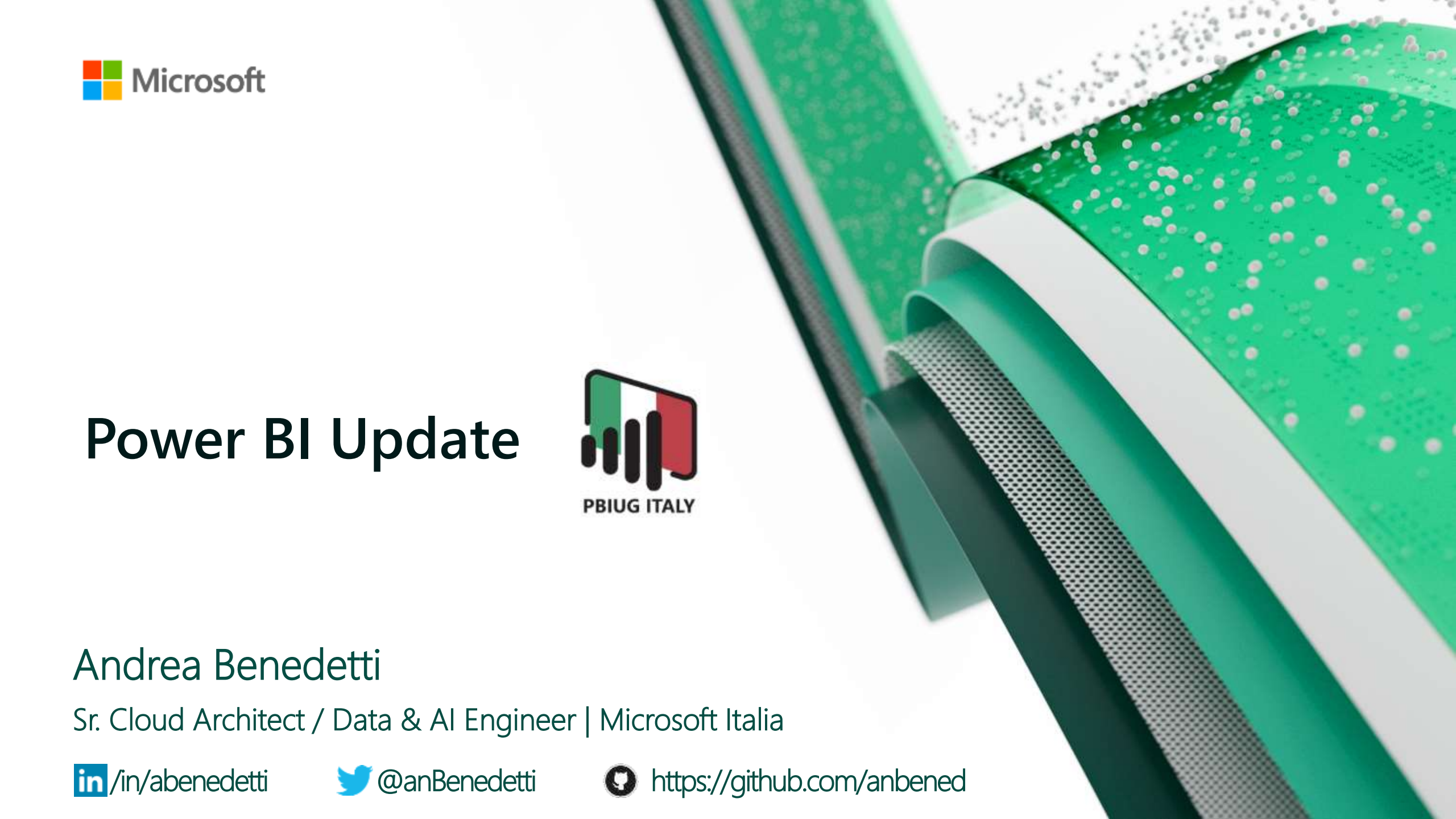
Microsoft

# Power BI Update



PBIUG ITALY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/in/abenedetti @anBenedetti https://github.com/anbened

# 1

# Features from Preview to GA

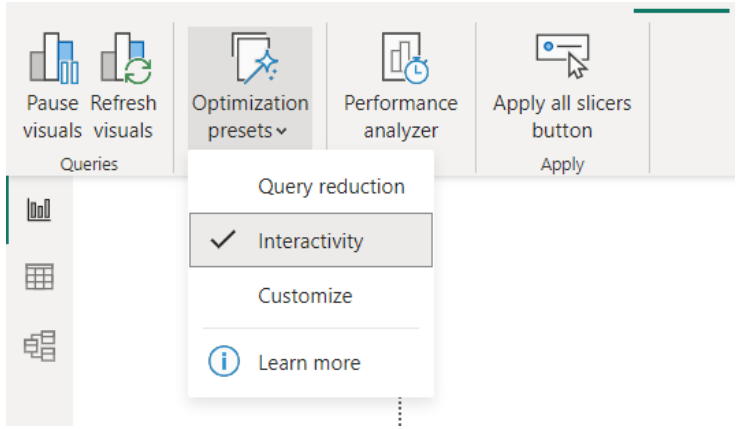
# Migration from AAS to Premium

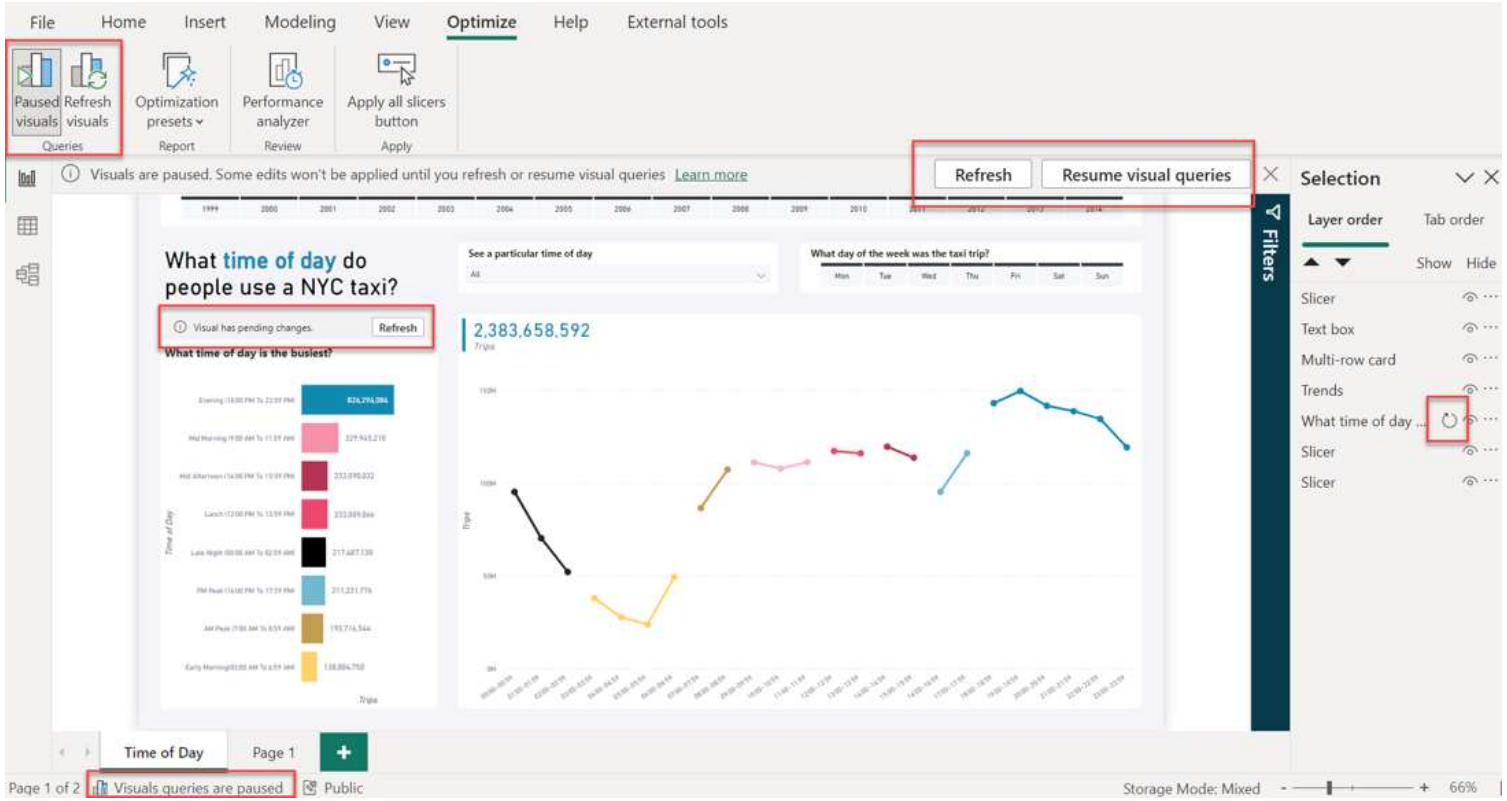
- Migrate semantic models from Azure Analysis Services (AAS) all the way to Fabric, Power BI Premium or Power BI Embedded in just a few clicks! Additionally, redirect existing reports to the migrated dataset

•Azure AS migration main page: **https://aka.ms/AASMigration**
•Azure AS migration guide: **https://aka.ms/AASMigrationGuide**
•Azure AS migration scenarios: **https://aka.ms/AASMigrationScenarios**

# Optimize ribbon in PBI Desktop

- The Optimize ribbon can help you improve your report authoring experience with three main features: Pause visuals, Optimization presets, and the Apply all slicers button.



# Hybrid tables

- Hybrid Tables, an advanced partitioning feature that lets you combine import mode and DirectQuery mode in a single table.

| Granularity | Name | Row Count |
|---|---|---|
| Year | 2011 | 295,489,717 |
| Year | 2012 | 297,678,498 |
| Year | 2013 | 295,575,442 |
| Year | 2014 | 292,477,875 |
| Year | 2015 | 297,780,469 |
| Year | 2016 | 294,060,081 |
| Year | 2017 | 300,419,682 |
| Year | 2018 | 296,541,108 |
| Year | 2019 | 292,787,420 |
| Year | 2020 | 299,273,979 |
| Quarter | 2021Q1 | 74,135,277 |
| Month | 2021Q104 | 24,939,498 |
| Day | 2021Q10501 | 820,805 |
| Day | 2021Q10502 | 826,885 |
| Day | 2021Q10503 | 821,043 |
| Day-DirectQuery | 2021Q10504-DQ | 271,110 |
| **Total** | | **3,063,898,887** |

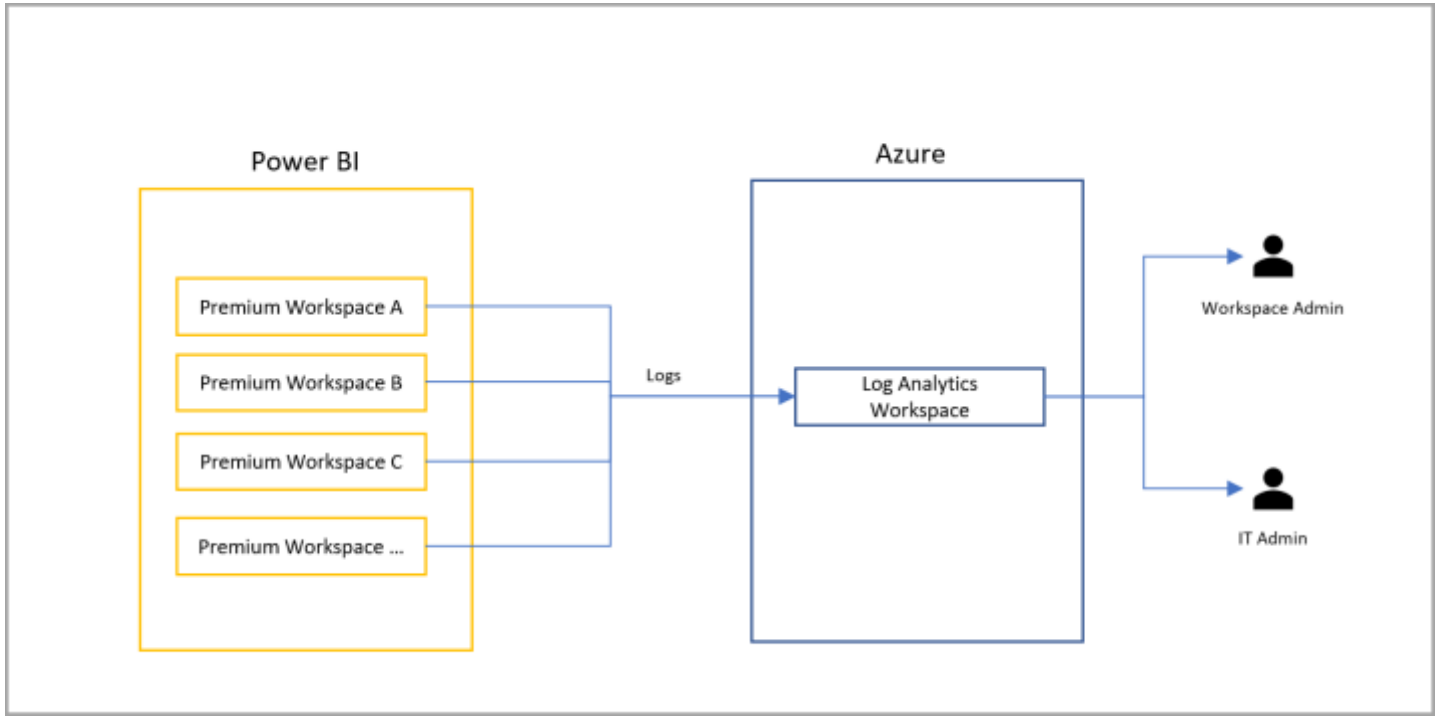
Archived: **Import**

Incremental refresh: **Import**

Real time: **DirectQuery**

# Azure Log Analytics for Power BI Dataset

- With this announcement, we have lifted the limitation and customers can now connect multiple workspaces to a single log analytics workspace.

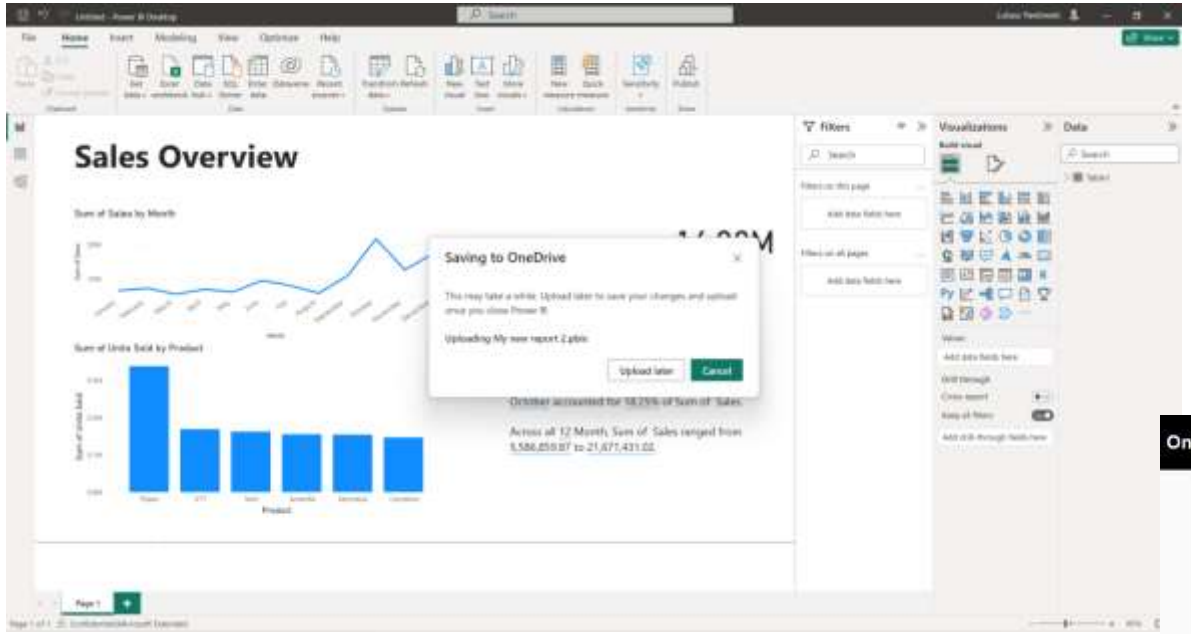


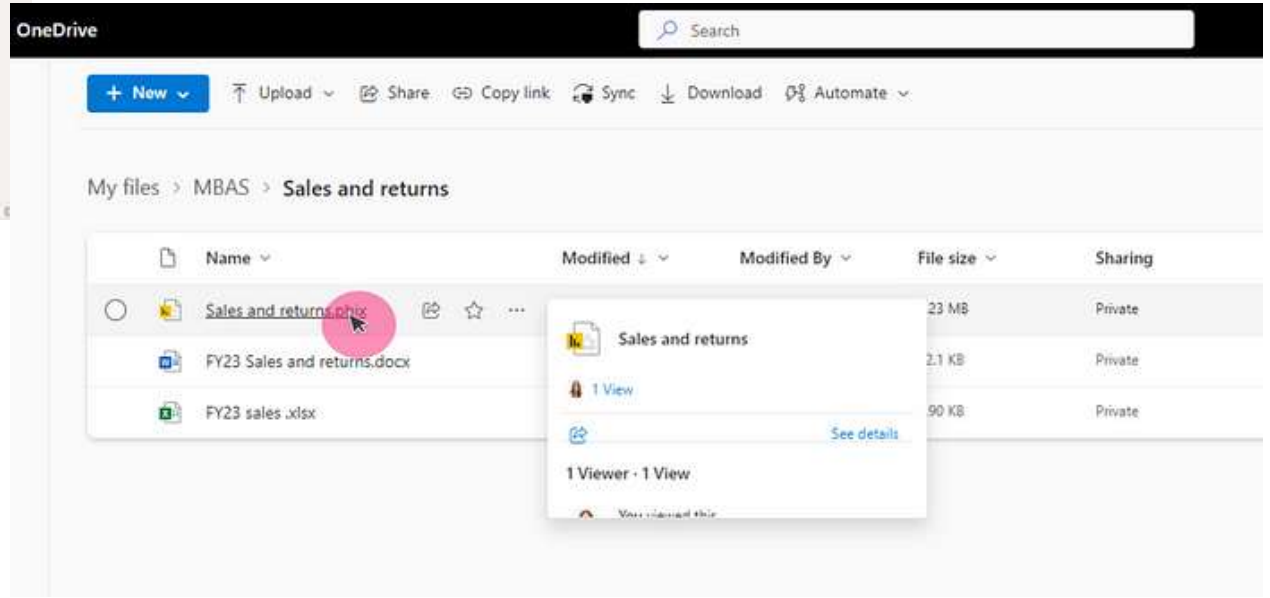
# 2

# Features in Preview

# Work seamlessly in Power BI Desktop with files in OneDrive and SharePoint

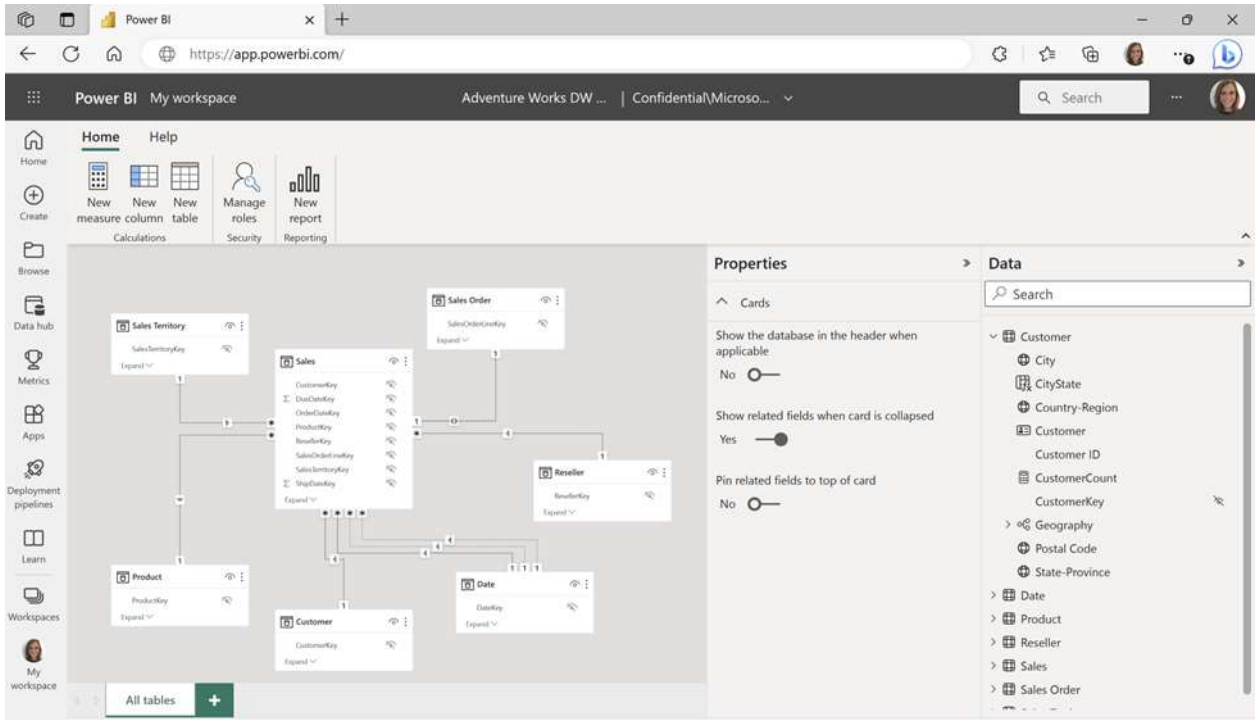
- These new capabilities help authors with file versioning, collaborating with other authors, and ensuring they always have a backup of their files in the cloud.



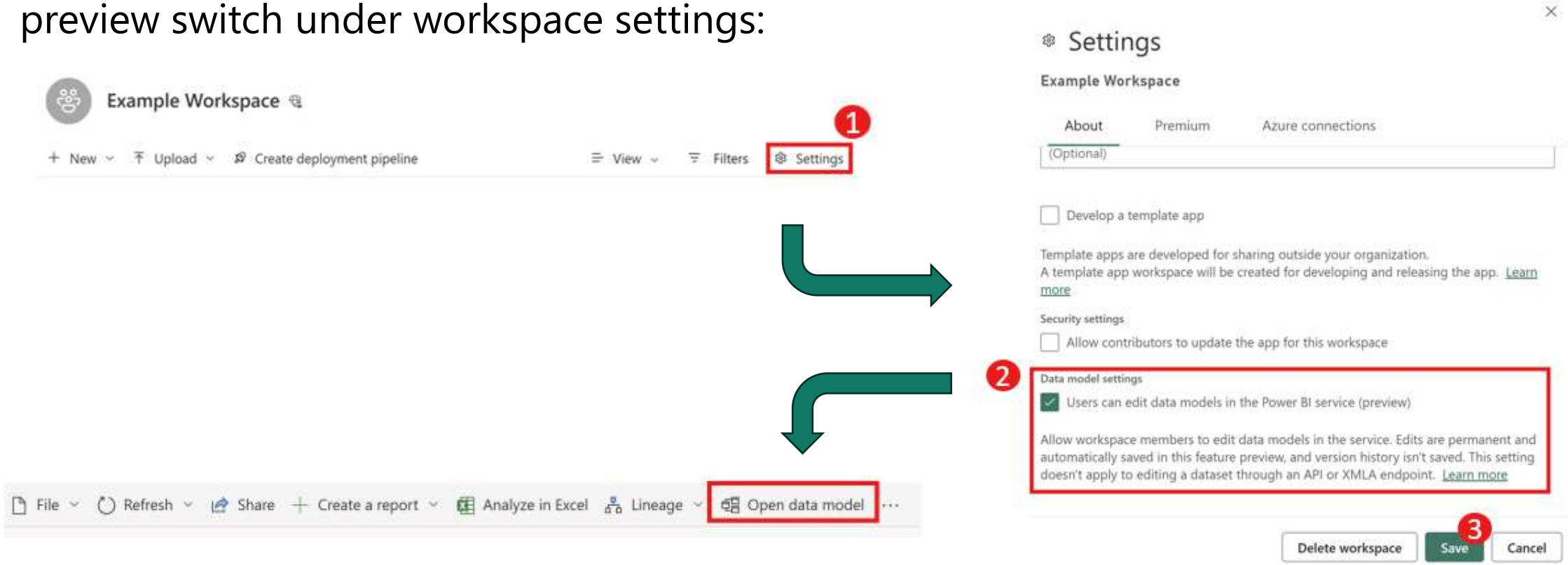
# Edit your data model in the Power BI Service 1/2

- Introducing data model editing on the web! A first step towards modeling parity in the Service. This feature is automatically turned on for datasets stored in My Workspace.



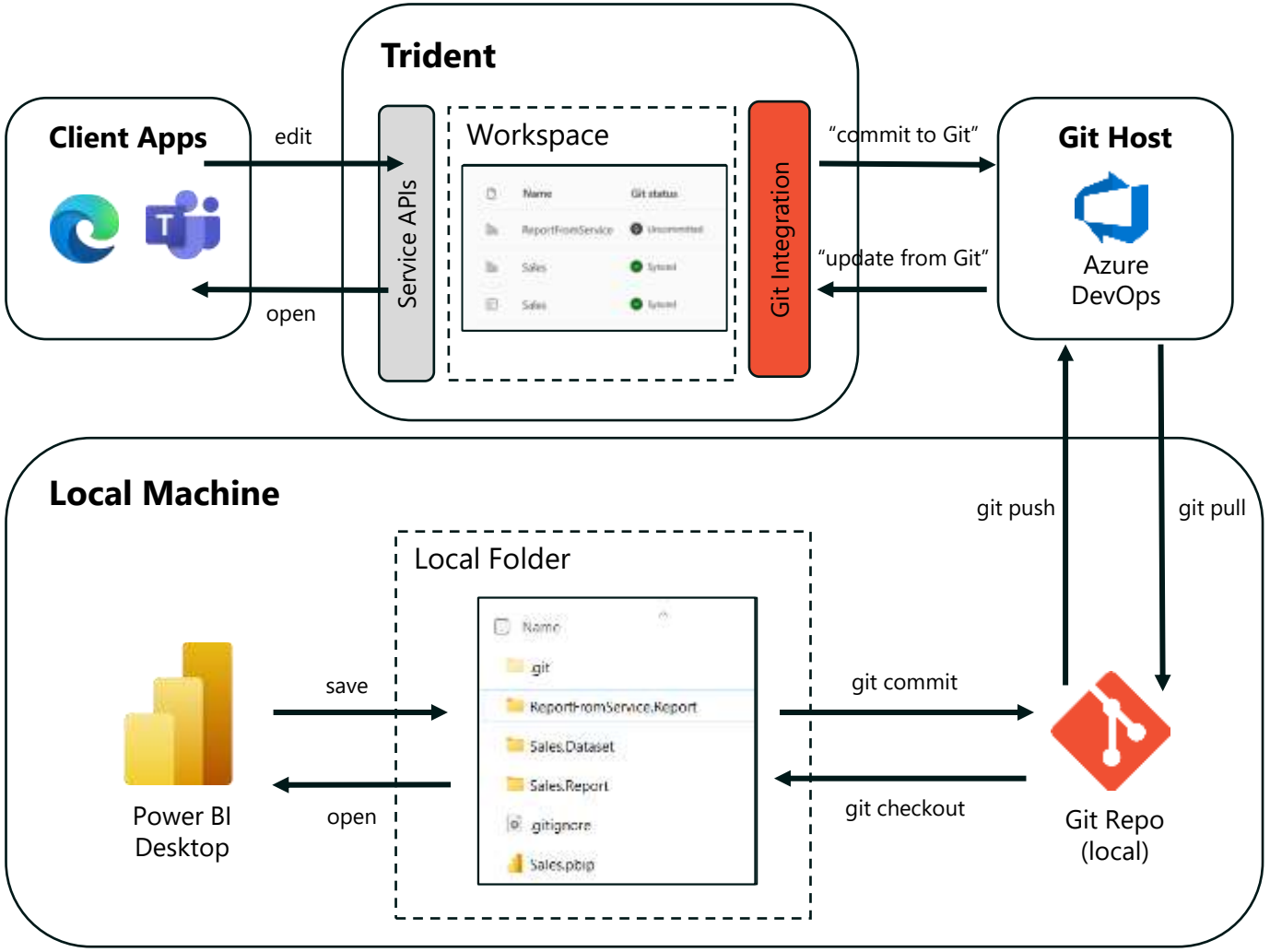
# Edit your data model in the Power BI Service 2/2

- This feature is automatically turned on for datasets stored in My Workspace. To try this experience in a collaborative workspace please turn on the Workspace level preview switch under workspace settings:



# Developer experiences

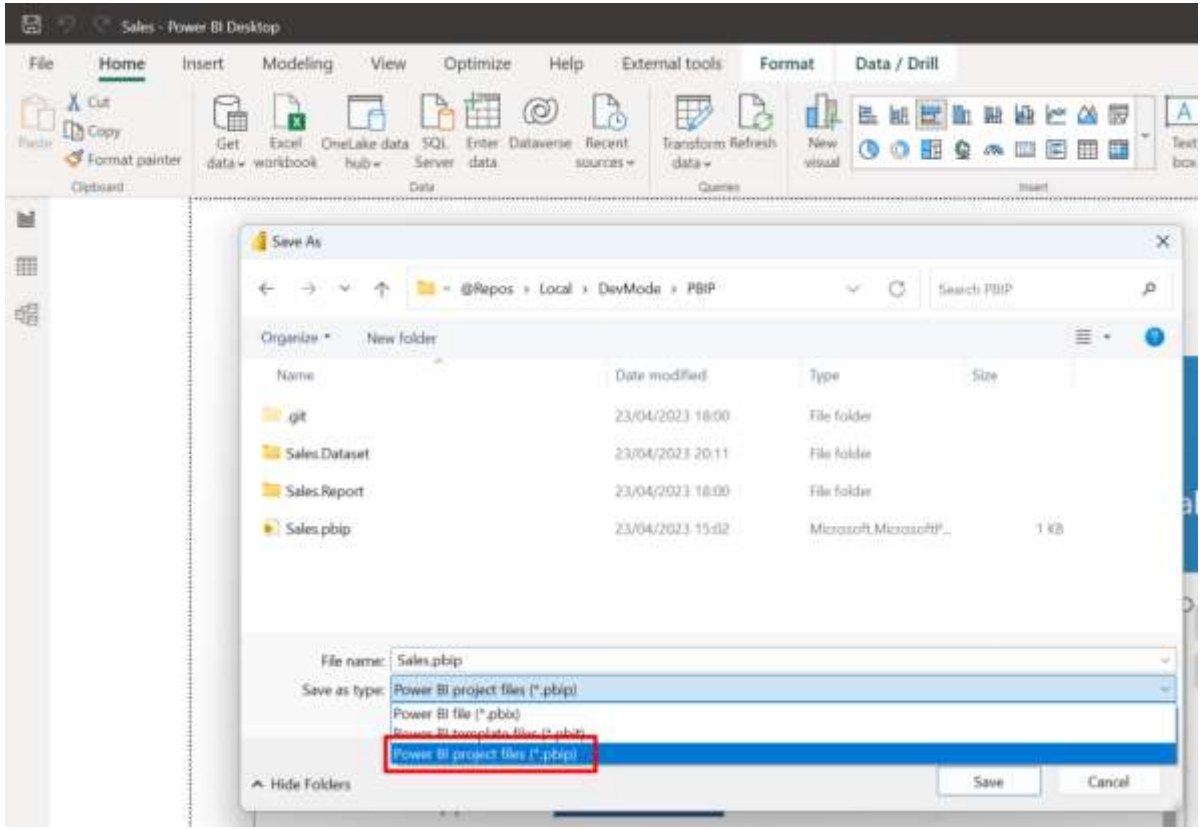
## Power BI Developer Mode with Fabric Git Integration

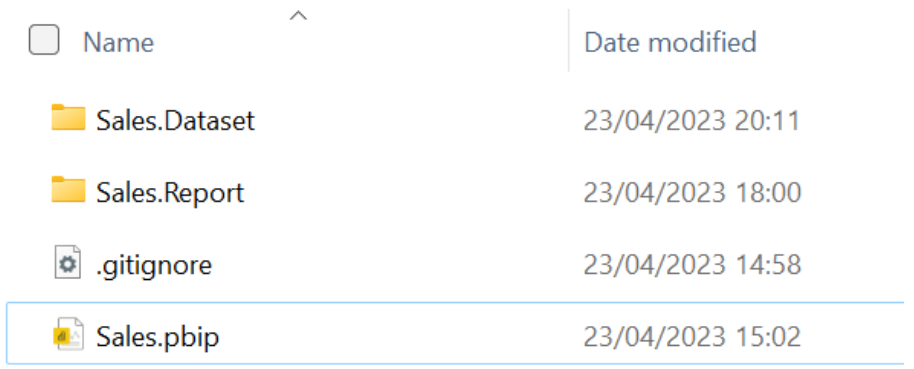


# Developer experiences

## Power BI Developer Mode with Fabric Git Integration

1. Power BI Desktop now lets you save your work as a **Power BI Project (PBIP)**
   - Report and dataset artifact definitions are saved as individual plain text files in a simple, intuitive folder structure

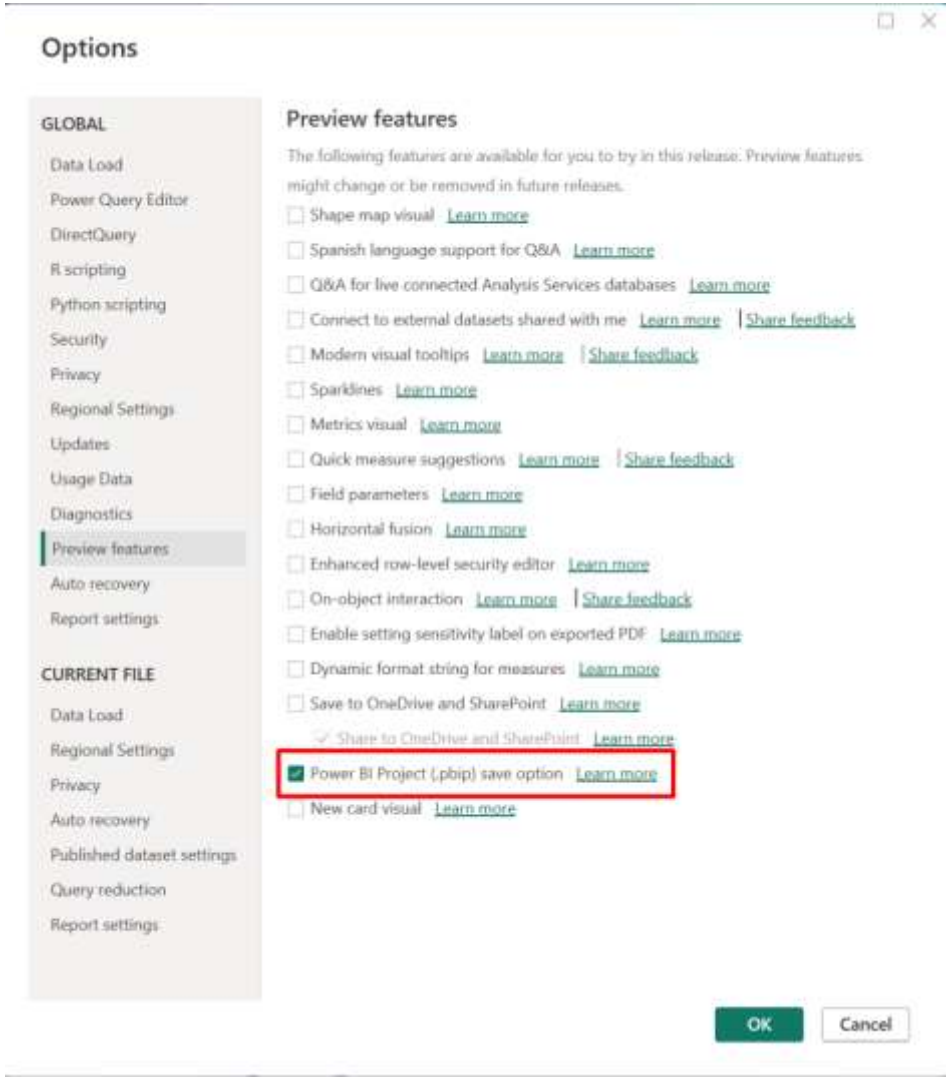


# Developer experiences

## Power BI Developer Mode with Fabric Git Integration

- Saving as a Power BI Project file is in Preview
- Go to File > Options and settings > Options > Preview features and check the box next to “Power BI Project (.pbip) save option”.

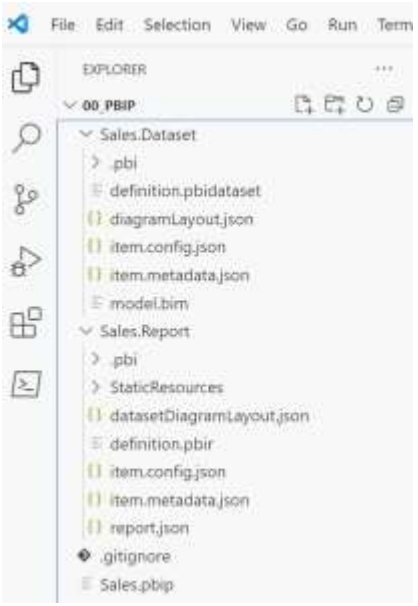


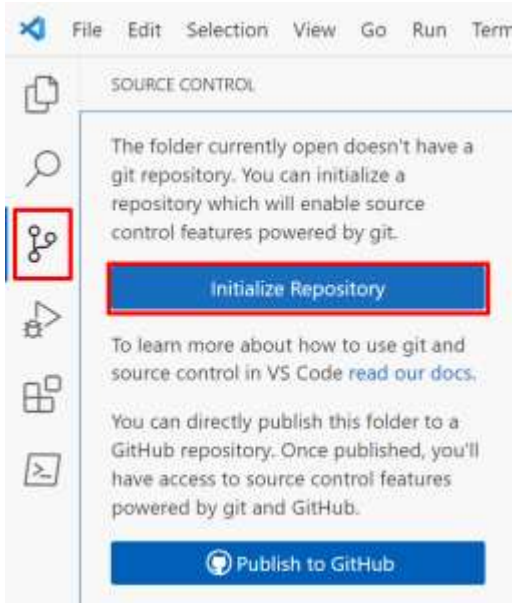
# Developer experiences

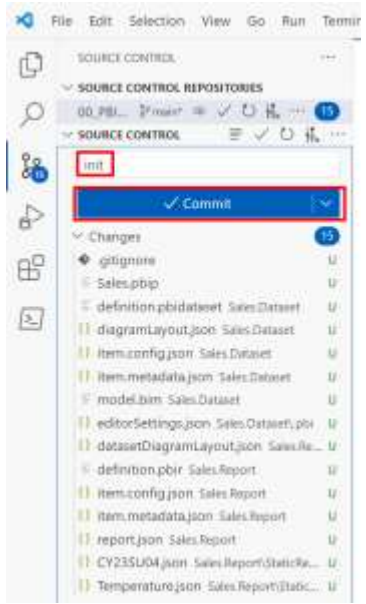
## Power BI Developer Mode with Fabric Git Integration

If you are new to Git, please refer to the following training courses to learn the basics:

- Introduction to Git – Training | Microsoft Learn
- Use Git version-control tools in Visual Studio Code – Training | Microsoft Learn
- Collaborate with Git – Training | Microsoft Learn
- Branching and merging in Git – Training | Microsoft Learn

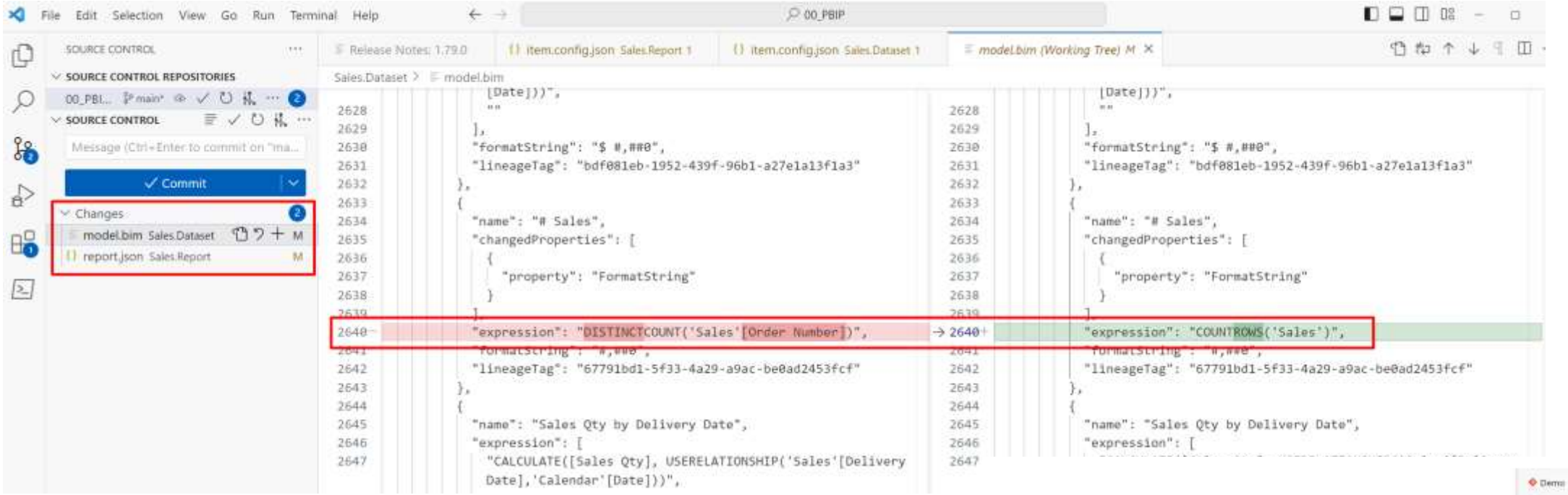


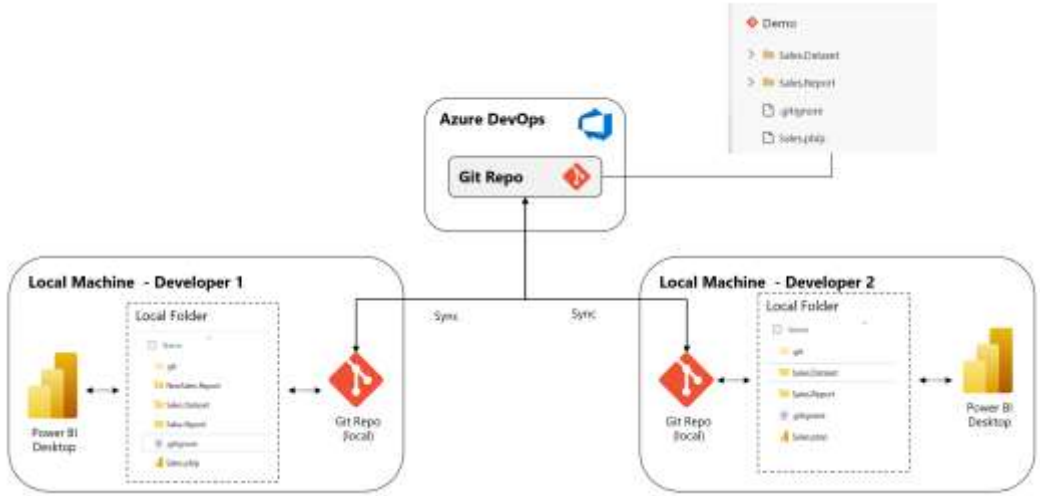



# Developer experiences

## Power BI Developer Mode with Fabric Git Integration

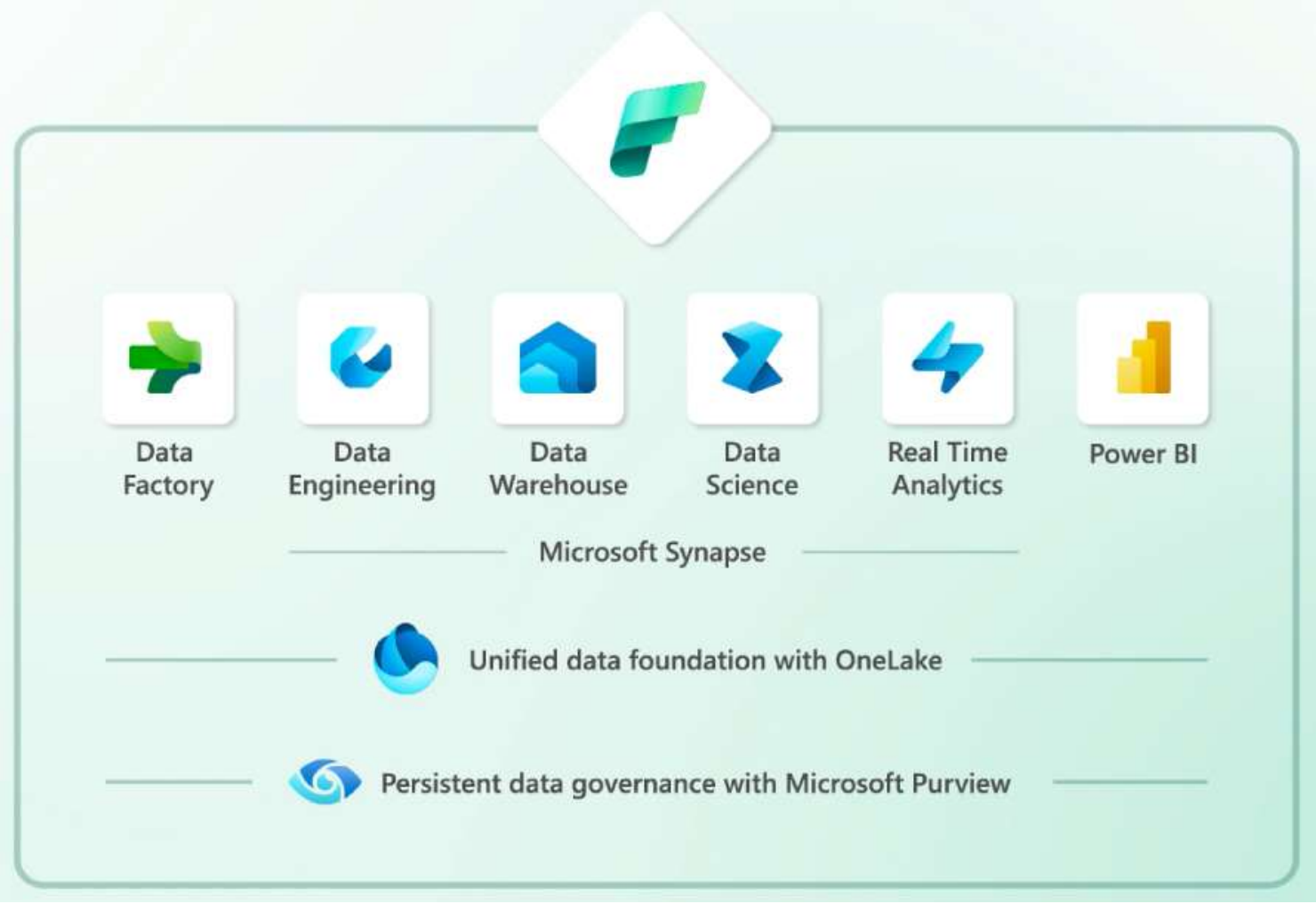


# 3

# Special Announcements

# Microsoft Fabric



# Still far too complex

- Many Products
- Different Experiences
- Proprietary and Open
- Dedicated and Serverless
- PaaS and SaaS
- Different Business Models
- Steep Learning Curves
- Deep Expertise Needed
- High Integration Effort

**Purview**

**Power BI**

**Kusto**

**Data Factory**

**Azure AI**

**Synapse DW**

**Synapse Spark**

# Analytics vNext

Data Factory

Kusto

Azure AI

Power BI

Synapse Spark

Synapse DW

Purview

From to collection of products, to…

# Microsoft Fabric

Data Integration

Data Lake

Spark Engines

Data Warehouse

Real Time Analytics

Data Science

Business Intelligence

Governance

## Unified analytics fabric

End-to-end analytics data fabric
From the data lake to the business user

# Microsoft Fabric

## End-to-end analytics data fabric
## From the data lake to the business user

### Complete Analytics Platform

- Everything, Unified
- SaaS-ified
- Azure OpenAI Assisted

### Lake centric and open

- OneLake
- One Copy
- Always Synched

### Empower Every Office User

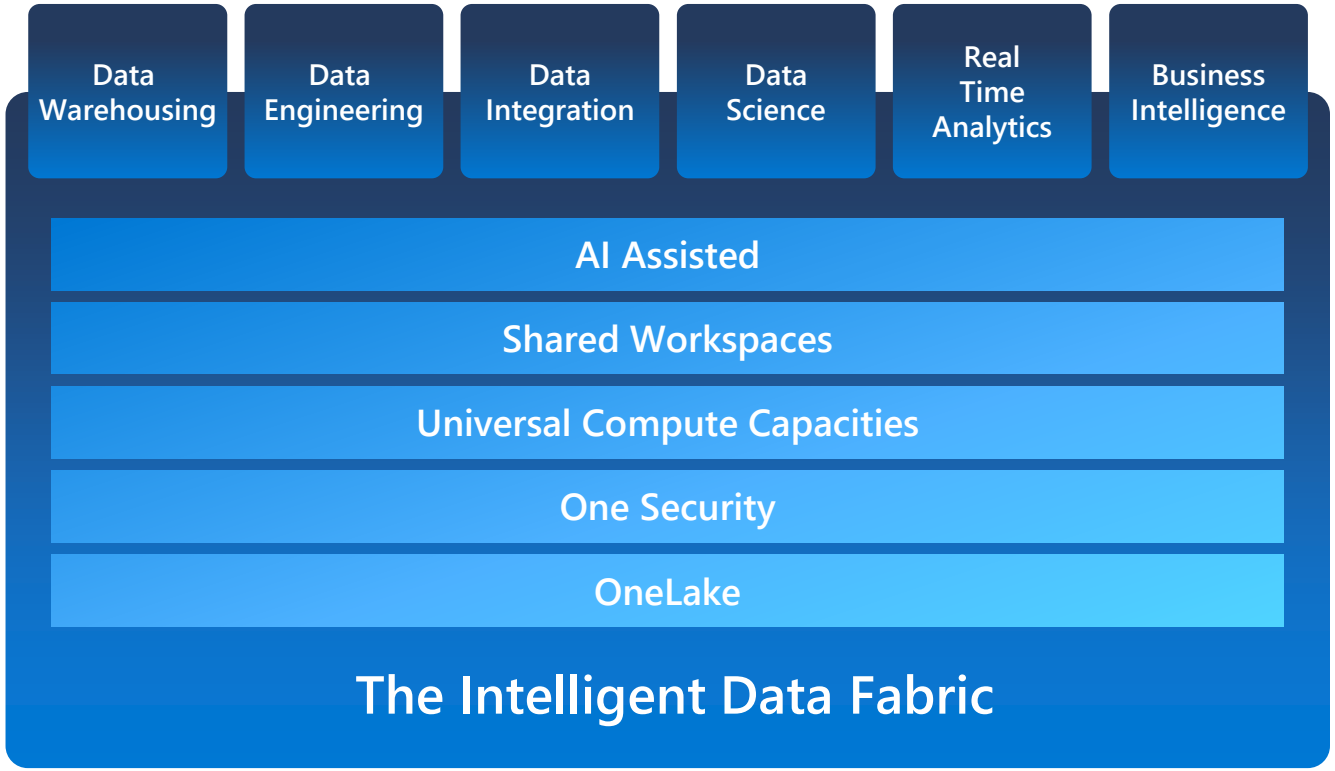
- Familiar and intuitive
- Built into Office
- Insight to action

### Pervasive security and governance

- End to end visibility
- Always governed
- Secure by default

# Unified analytics fabric

## End-to-end analytics data fabric
## From the data lake to the business user

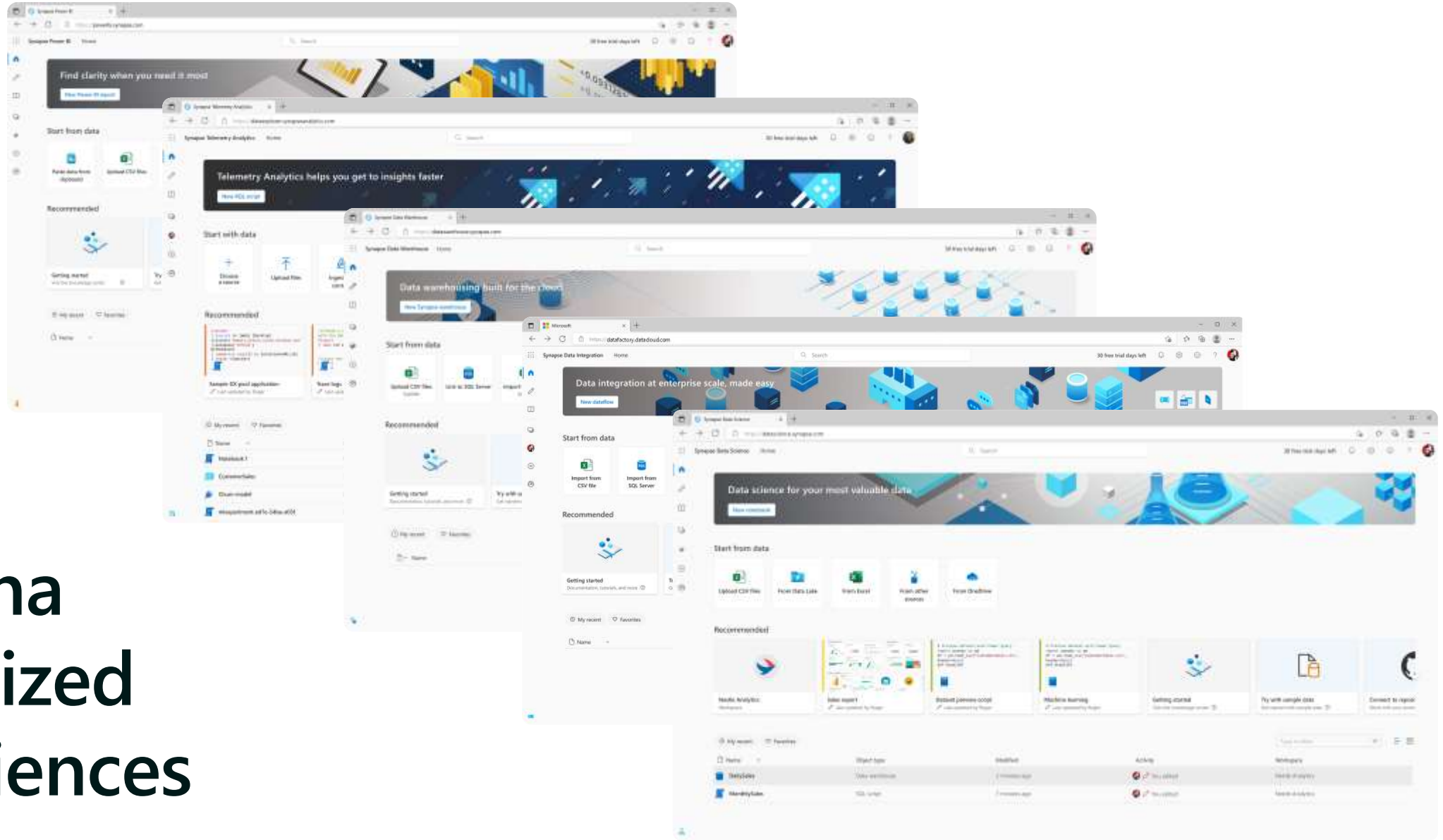



### Single…

Onboarding and trials
Sign-on
Navigation model
UX model
Workspace organization
Collaboration experience
Data Lake
Storage format
Data copy for all engines
Security model
CI/CD
Monitoring hub
Data Hub
Governance & compliance

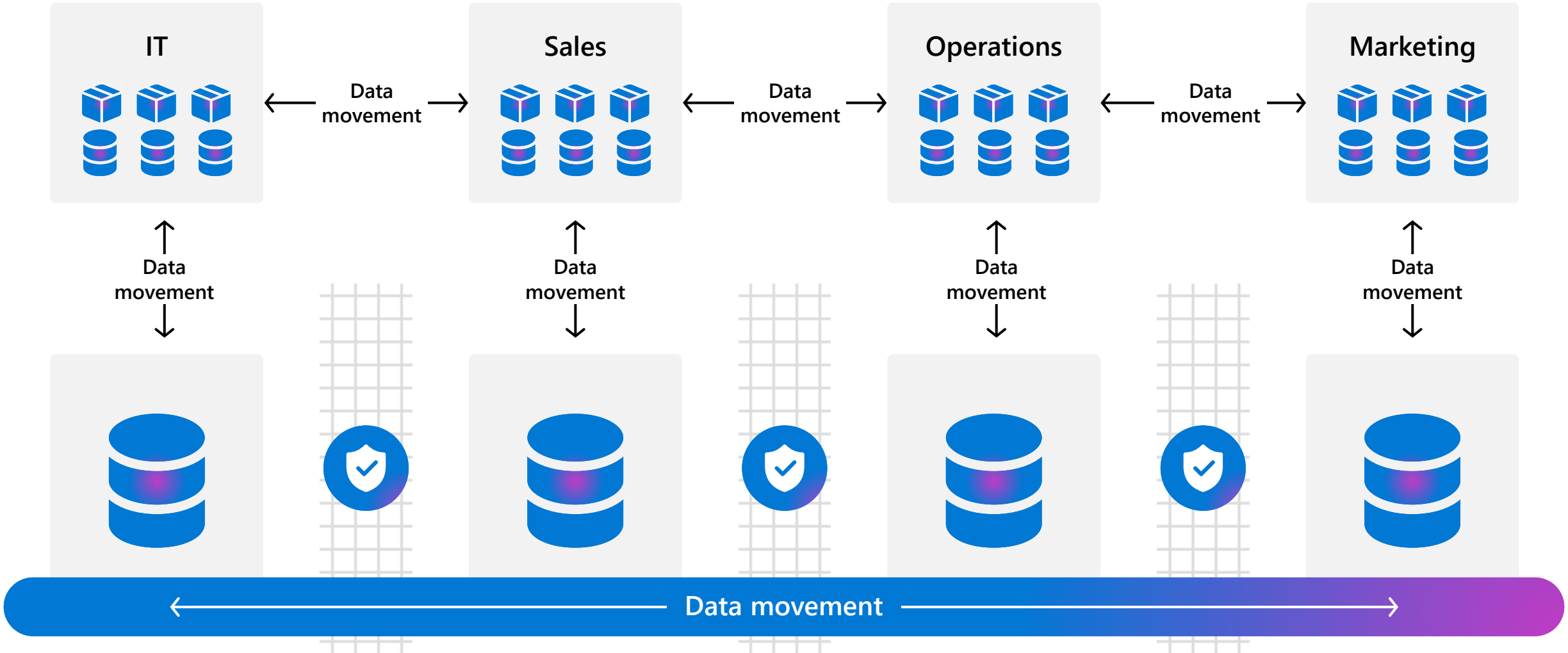
### Ad personam experience…

Data Warehousing
Data Engineering
Data Integration
Data Science
Real Time Analytics
Business Intelligence



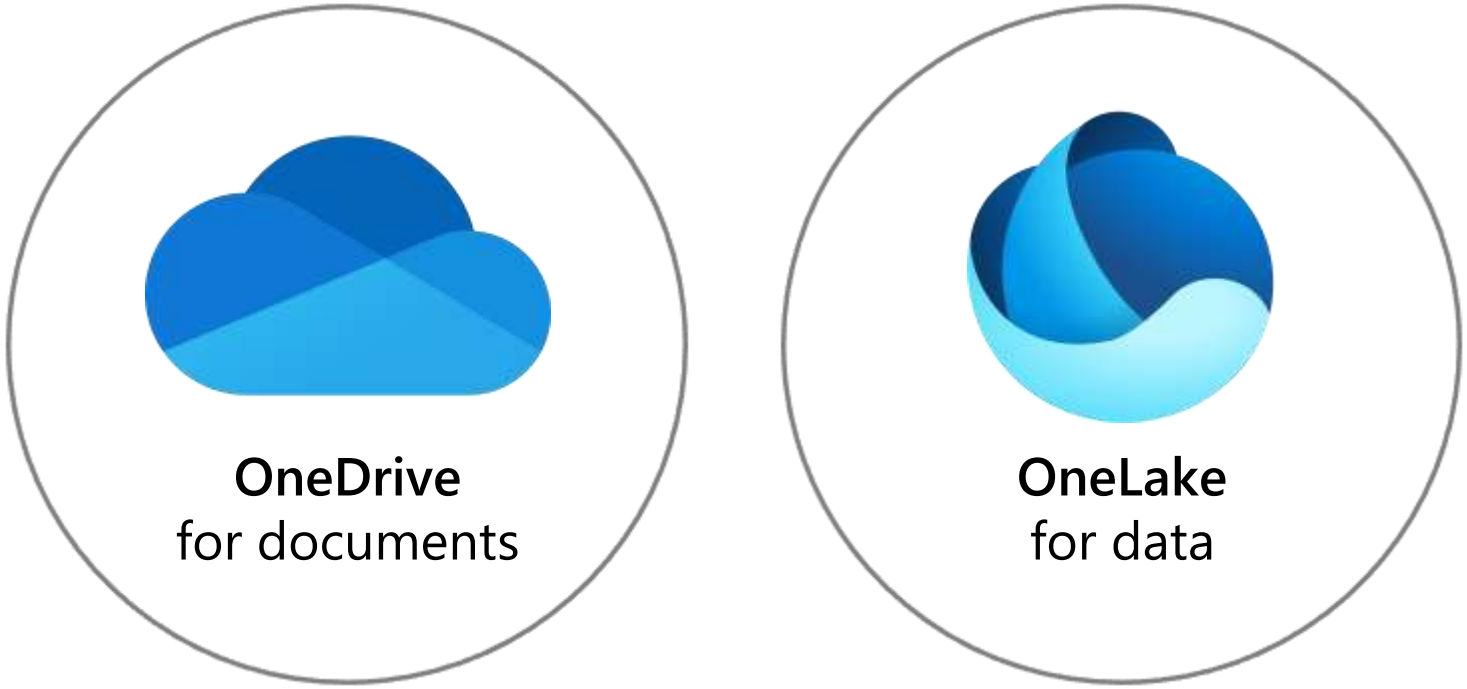

# Persona optimized experiences

# Today: Multiple siloed lakes with lots of duplication



# OneLake for all data

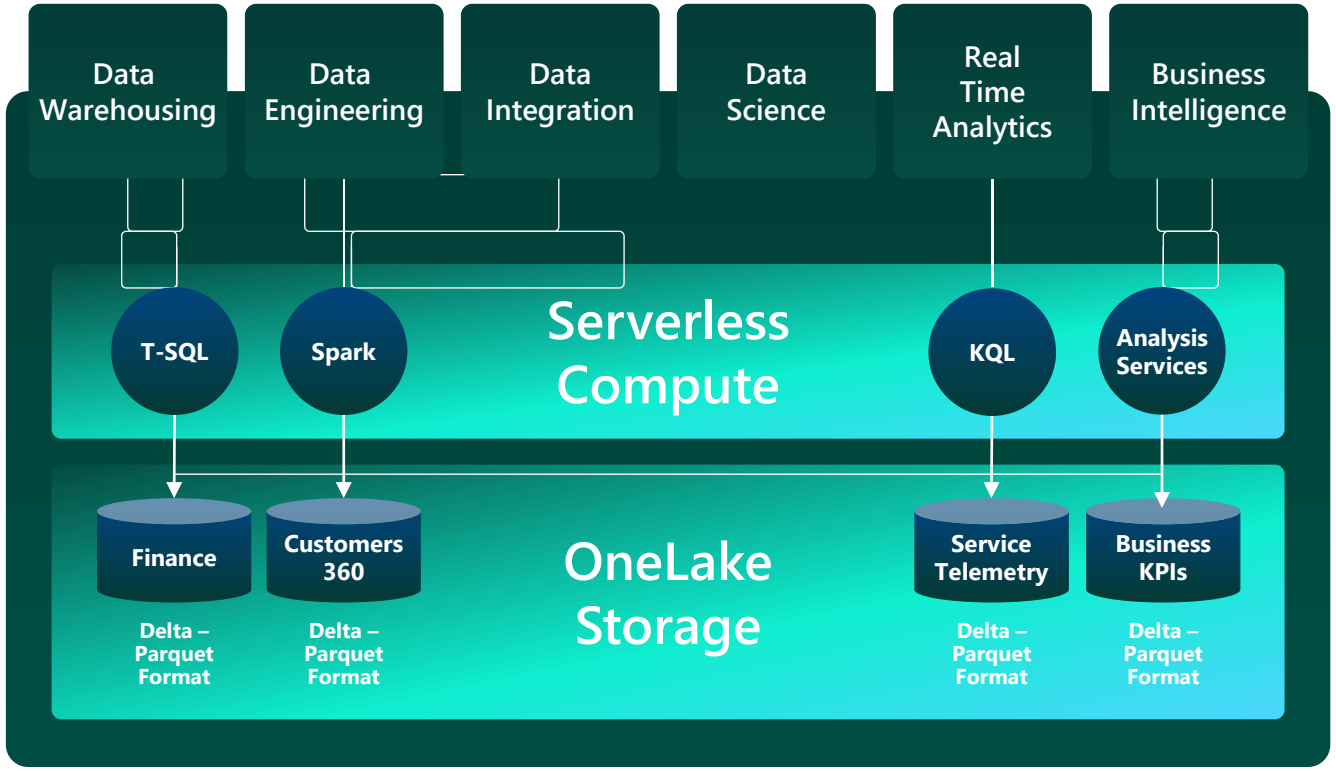
## "The OneDrive for data"




**OneLake provides a data lake as a service without you needing to build it**

# One Copy for all computes

## Real separation of compute and storage




All the compute engines store their data automatically in OneLake

The data is stored in a single common format

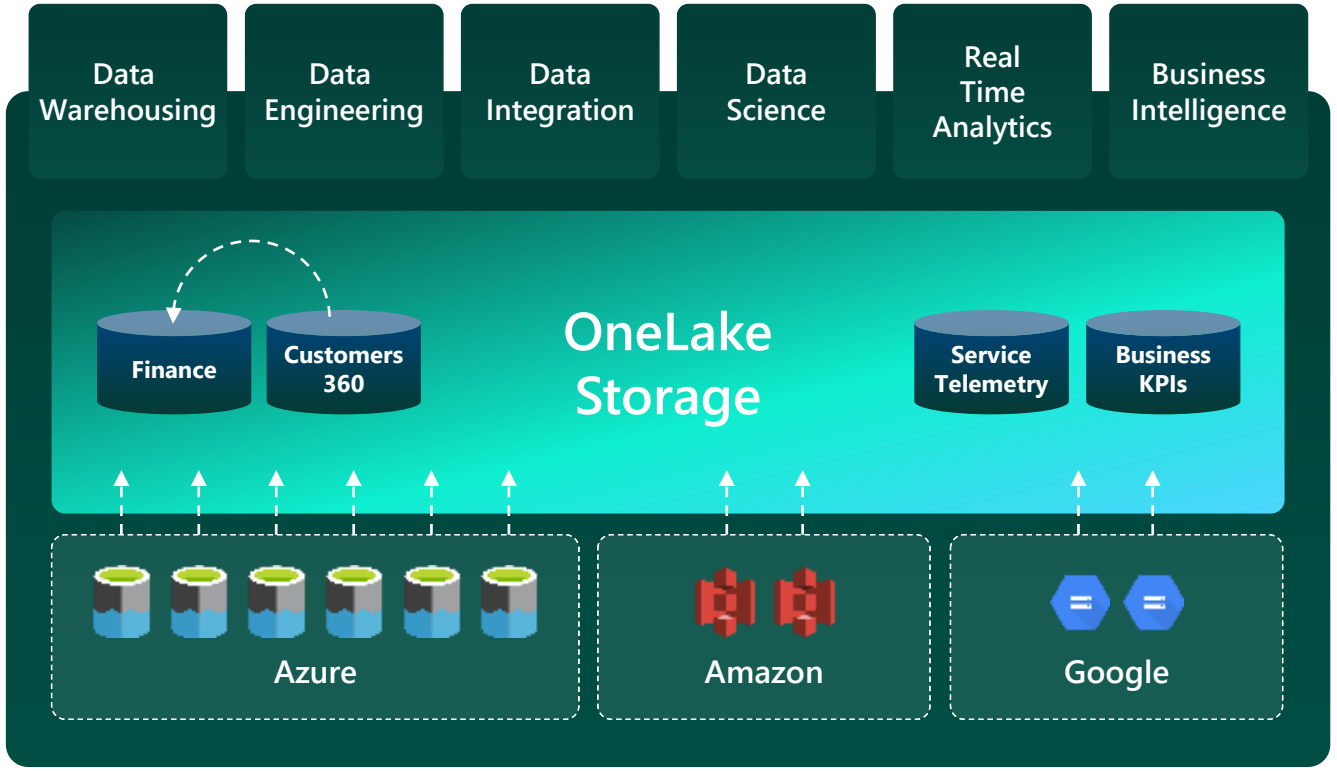
Delta – Parquet, an open standards format, is the storage format for all tabular data in Analytics vNext

***Once data is stored in the lake, it is directly accessible by all the engines without needing any import/export***

All the compute engines have been fully optimized to work with Delta Parquet as their native format

Shared universal security model is enforced across all the engines

# One Copy from all sources




Sharing data in OneLake is as easy as sharing files in OneDrive

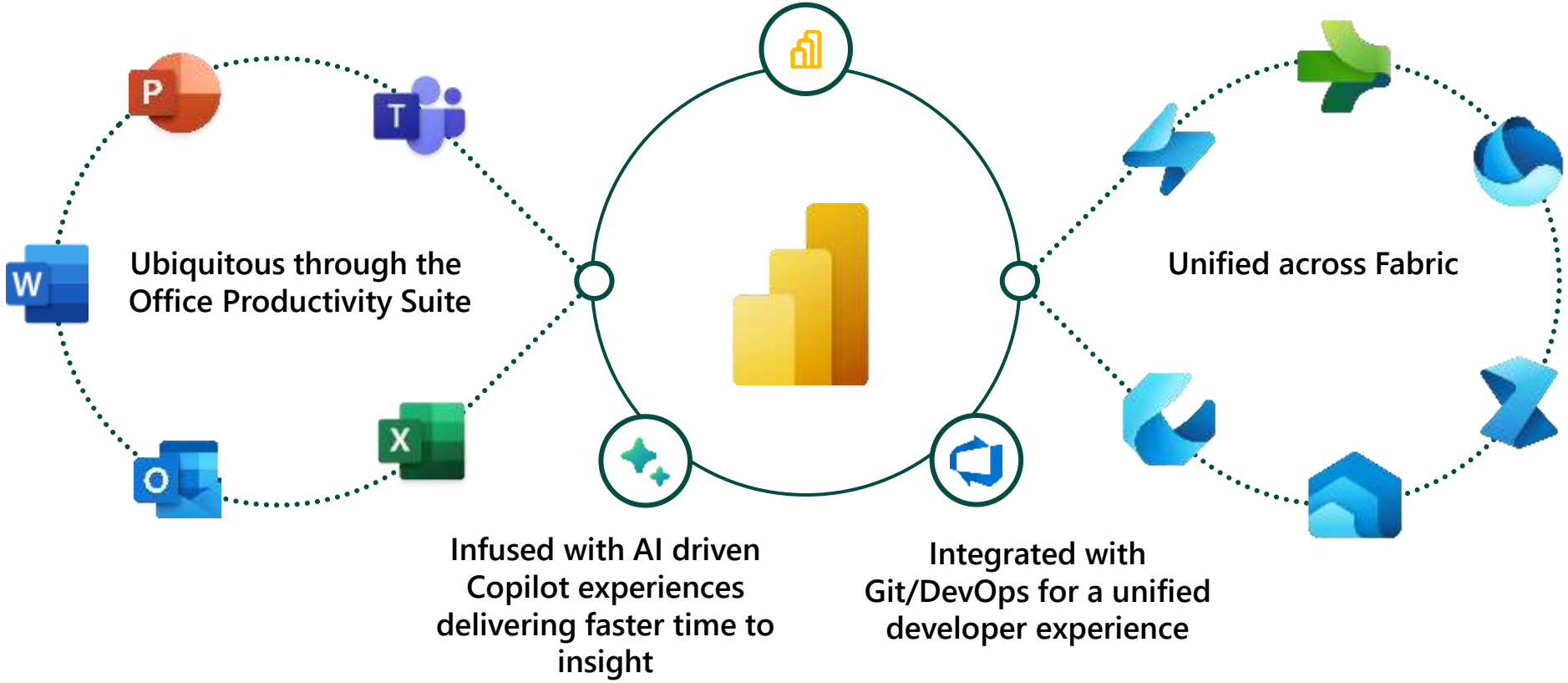
With shortcuts, data throughout OneLake can be composed without data movement

Shortcuts also allow linking of data in ***Azure, AWS, and GCP, without any data duplication***, making OneLake the first multi-cloud data lake

With industry standard APIs, OneLake can be accessed by any application or service

# PBI Strategy

## Be the undisputed leader in ease of use, depth of data visualization and analysis capabilities



# PBI Data Read

## "Direct Query Mode"

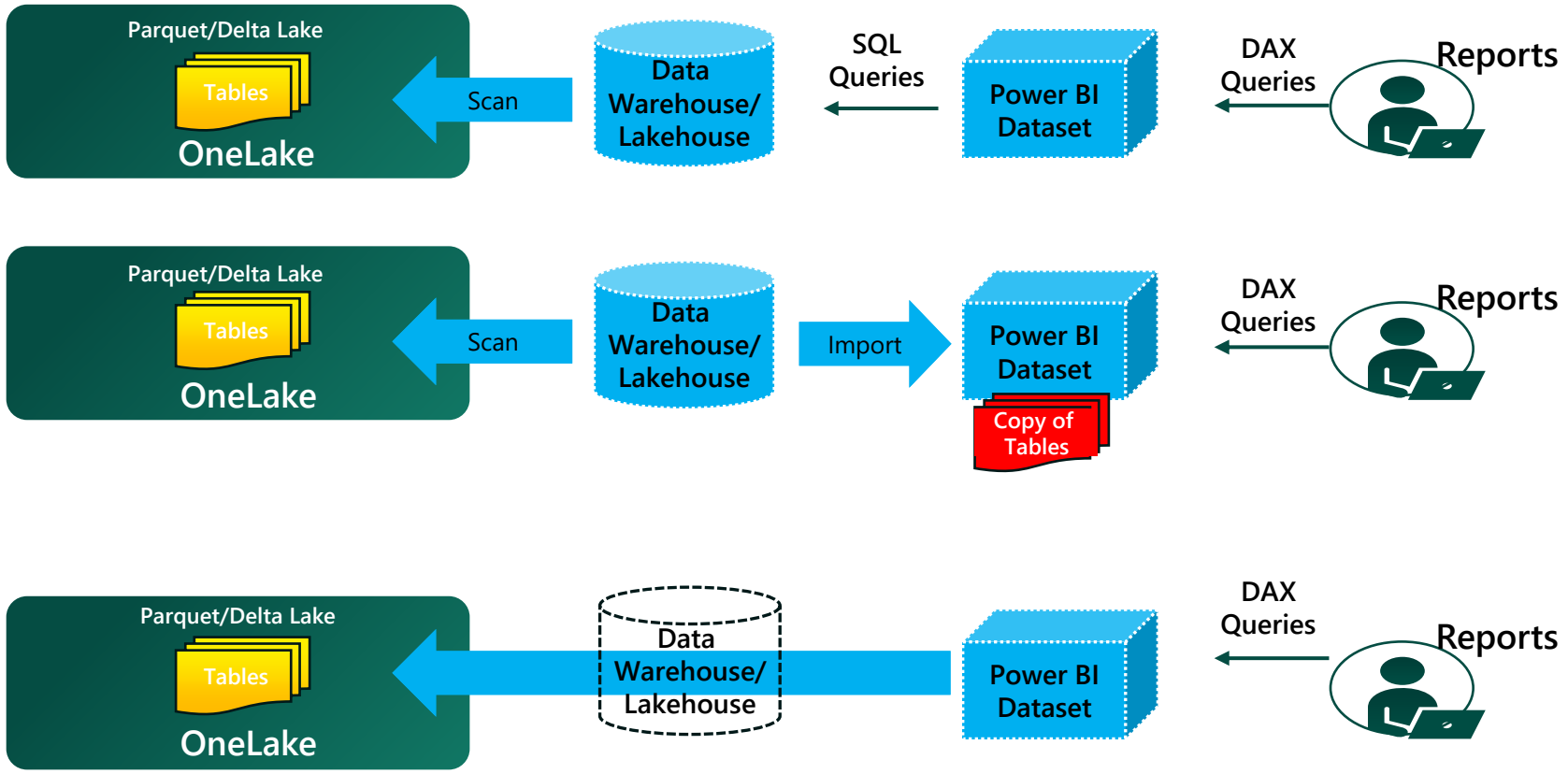
Slow, but real time

## "Import Mode"

Latent & duplicative but fast

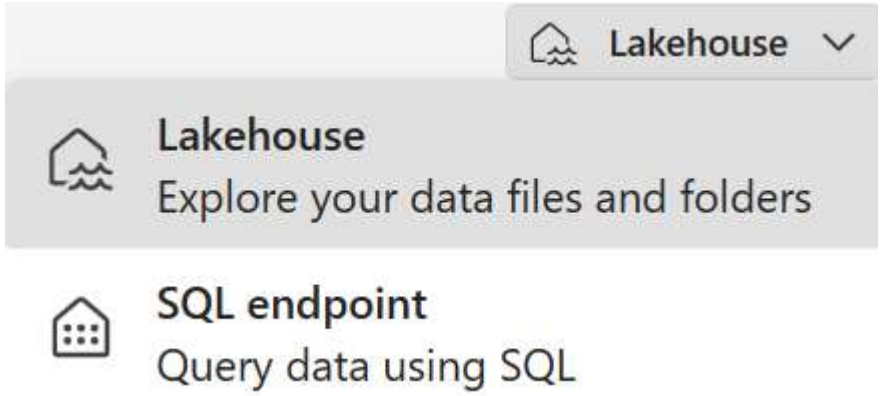
## "Direct Lake Mode"

Perfect!



# PBI Direct Lake Mode

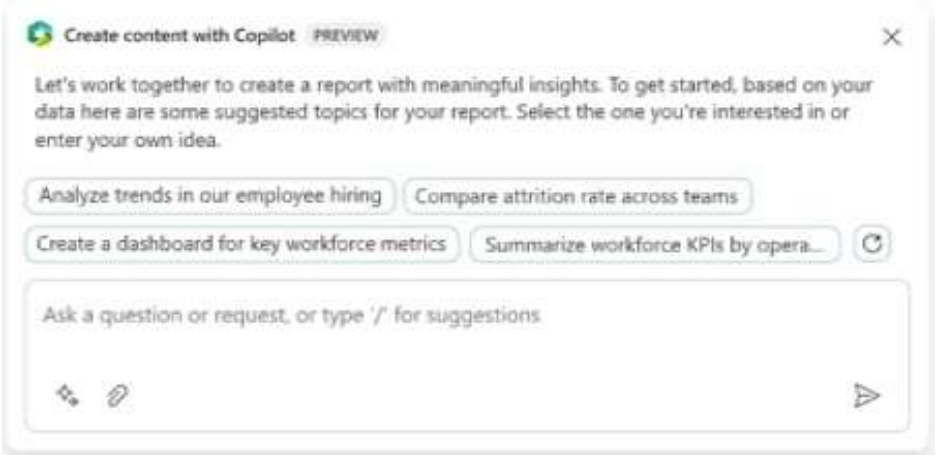
## Several Benefits




- Improved query performance
  - queries are executed directly on the Delta tables
  - performance is similar to the import mode
- Automatic detection of changes
  - Any changes made to the Delta tables are automatically detected
- Compatibility with other compute engines
  - Power BI is just one compute in the Fabric ecosystem
  - Other compute engines like Spark notebooks, data warehouses, and Kusto can also access the same Delta tables
- Reduced data movement
  - Data does not need to be copied or refreshed as frequently as in the import mode

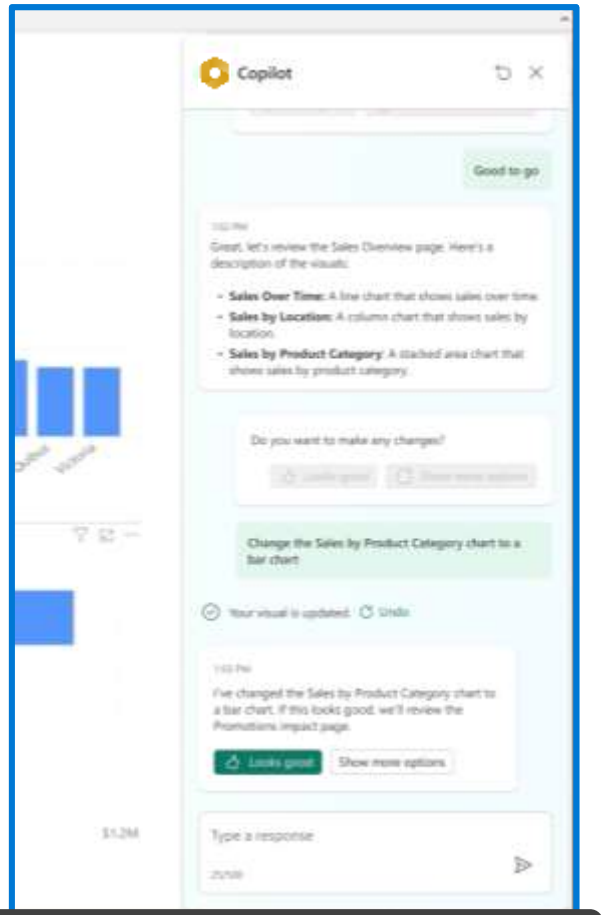
# Introducing Copilot in Power BI

Transformational chat-based experiences that guide and interact with users to deliver faster time to insight within specific end-to-end scenarios



# Introducing Copilot in Power BI

## Chat based Copilot experiences

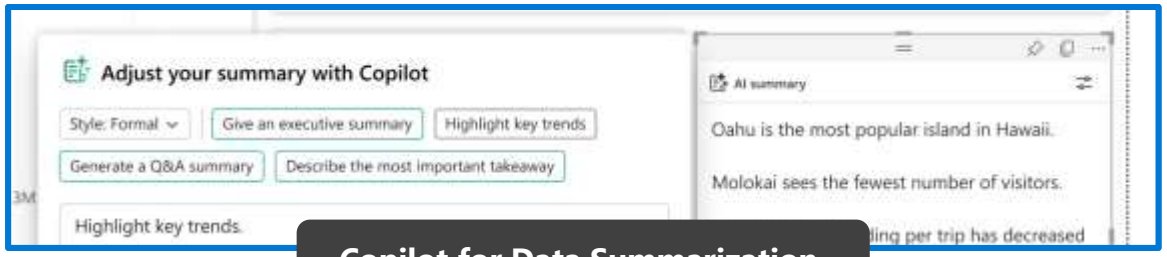



**Copilot in Power BI for Creators & Consumers**

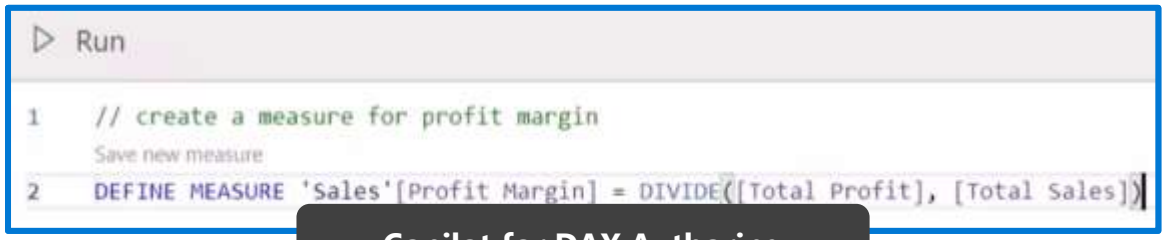
Private Preview
Fall 23

Private Preview
Winter 23

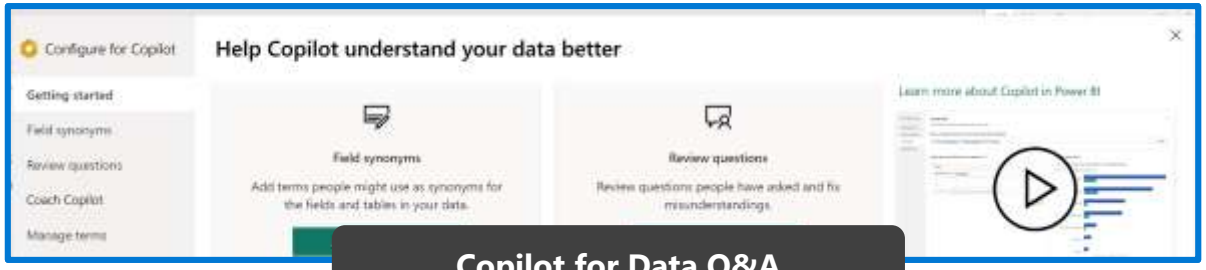
## Contextual experiences enhancing Power BI features




**Copilot for Data Summarization**




**Copilot for DAX Authoring**



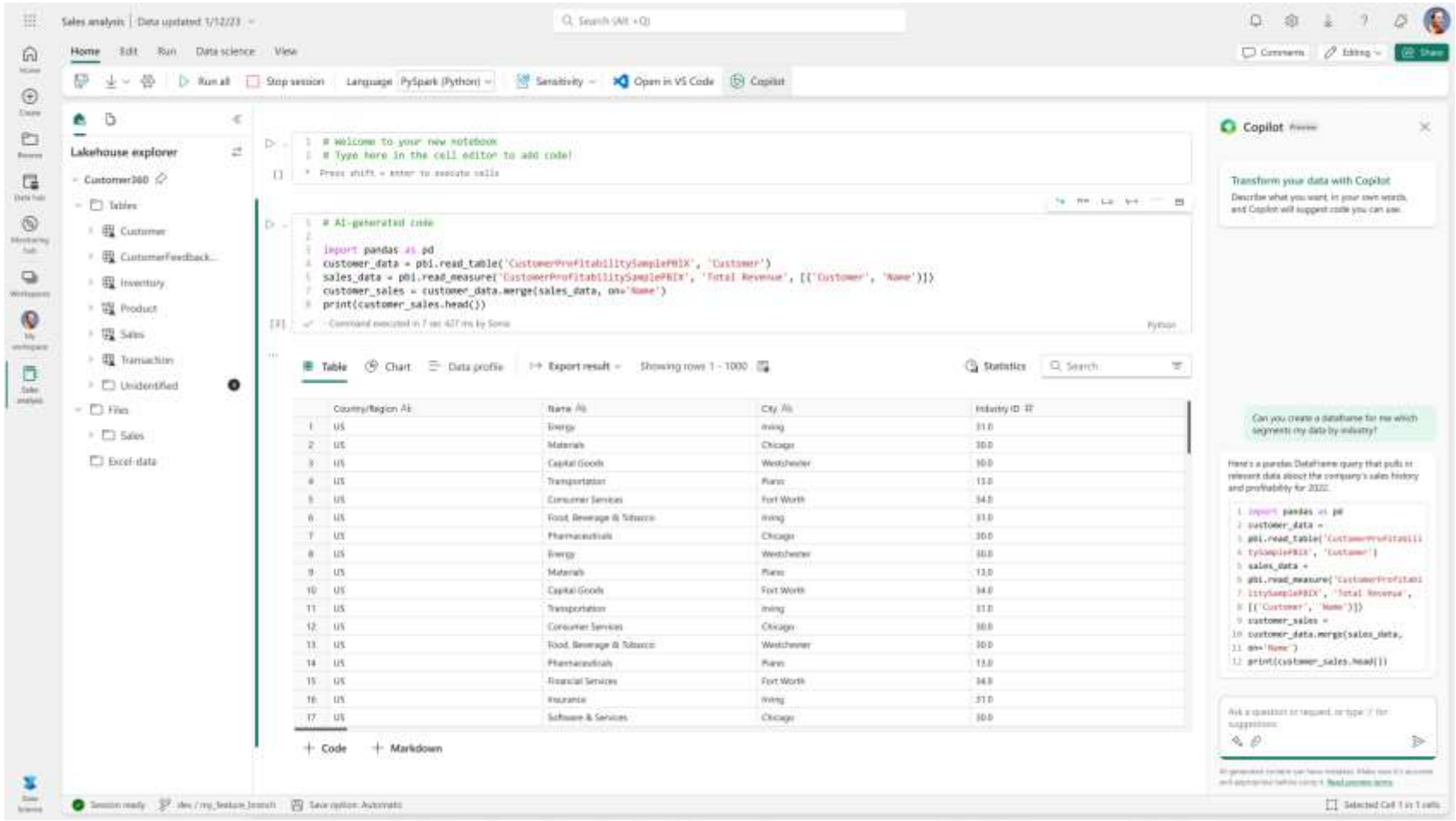

**Copilot for Data Q&A**

# Copilot experiences for developers

Copilot embeds the best of Azure Open AI, contextualized with your data, directly into your development workflows

**Improve productivity:**

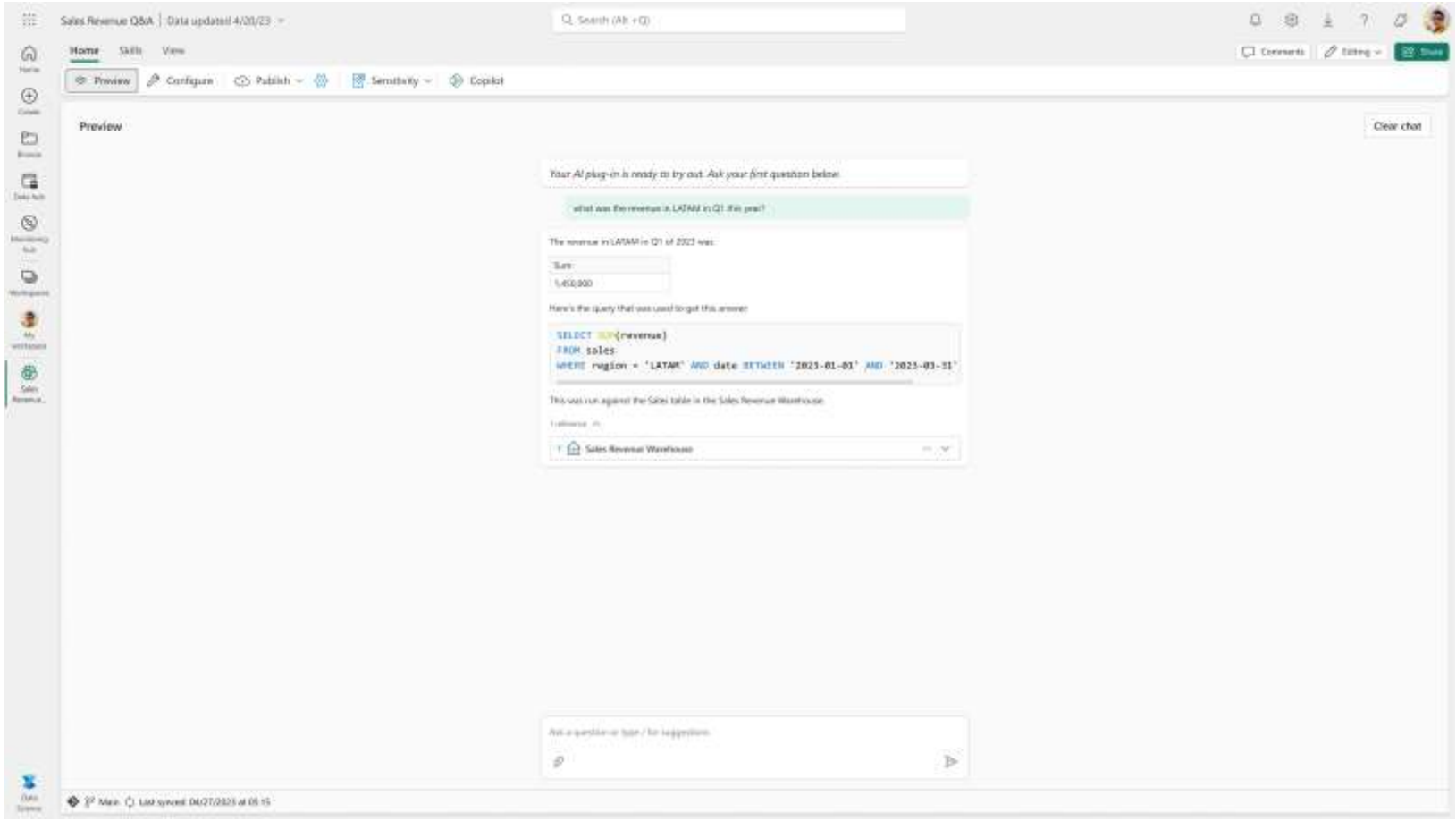
- Code generation
- Generate natural language explanations and summary of code and data
- Simplify migration



# Create AI Plugins for *your* Data

Create and customize your own AI plugin for answering questions about your data in your Lakehouse/Warehouse.

These data centric AI Plugins can be **published and used in other chatbots like M365 Business Chat** and can also be consumed in experiences across MS Fabric.



# Available now

## Public preview

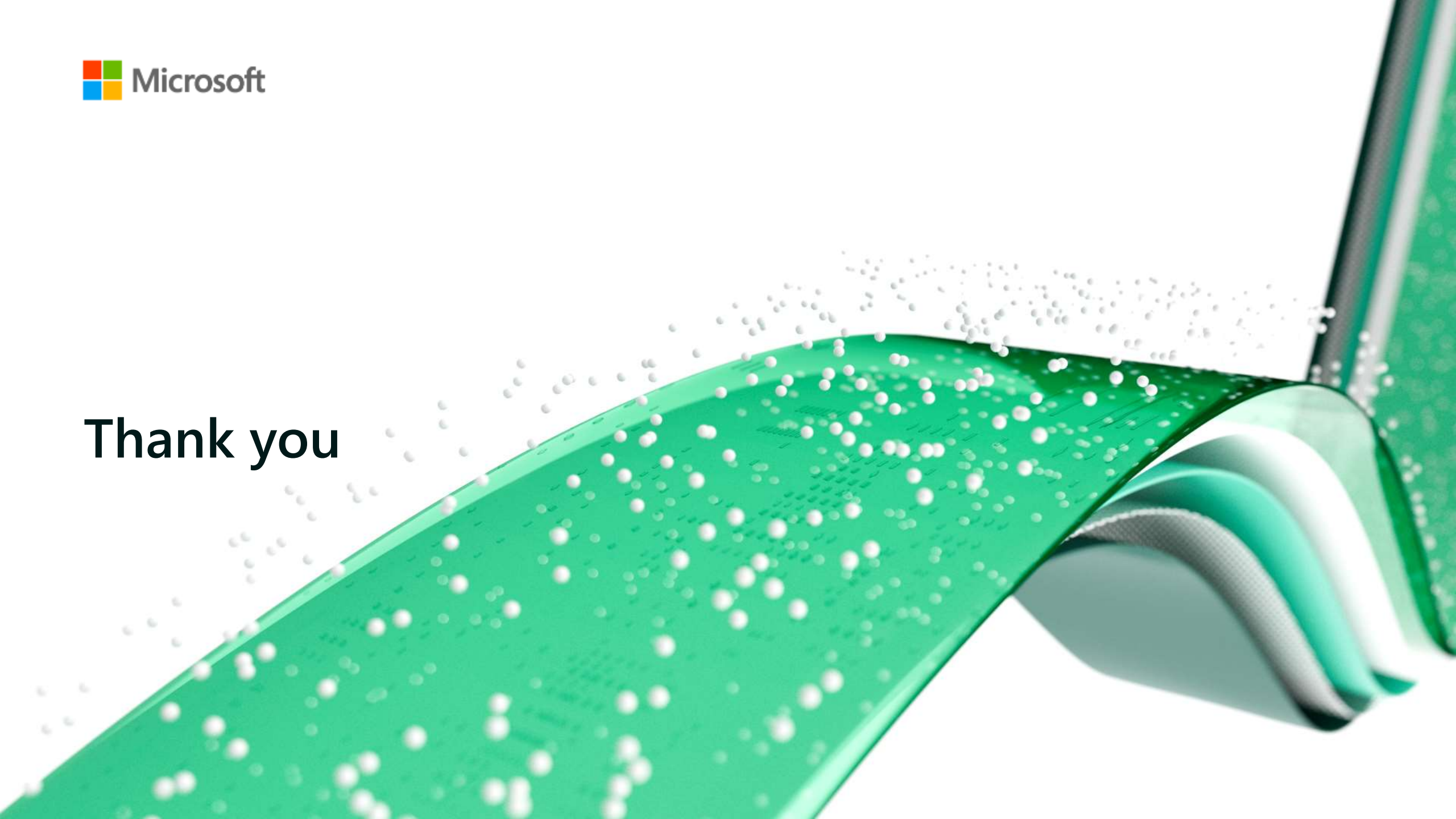
- Data Factory
- Synapse Data Engineering
- Synapse Data Science
- Synapse Data Warehousing
- Synapse Real Time analytics
- Copilot for Power BI (DAX)
- OneLake

## Generally available

- Power BI

## Private Preview

- Data Activator
- Copilot for Microsoft Fabric
- Copilot for Power BI (full)

Microsoft

# Thank you