





Microsoft Fabric

What's is and what's next?

Josh Ndemenge

Cloud Advocate, Data

A world awash with data...

How do you translate data into
competitive advantage?

Microsoft Analytics Portfolio



Data Factory



Synapse DW



Purview



Event Hub



Data Explorer



Azure AI



Power BI



Synapse Spark



Azure Databricks

5 Million

Developers



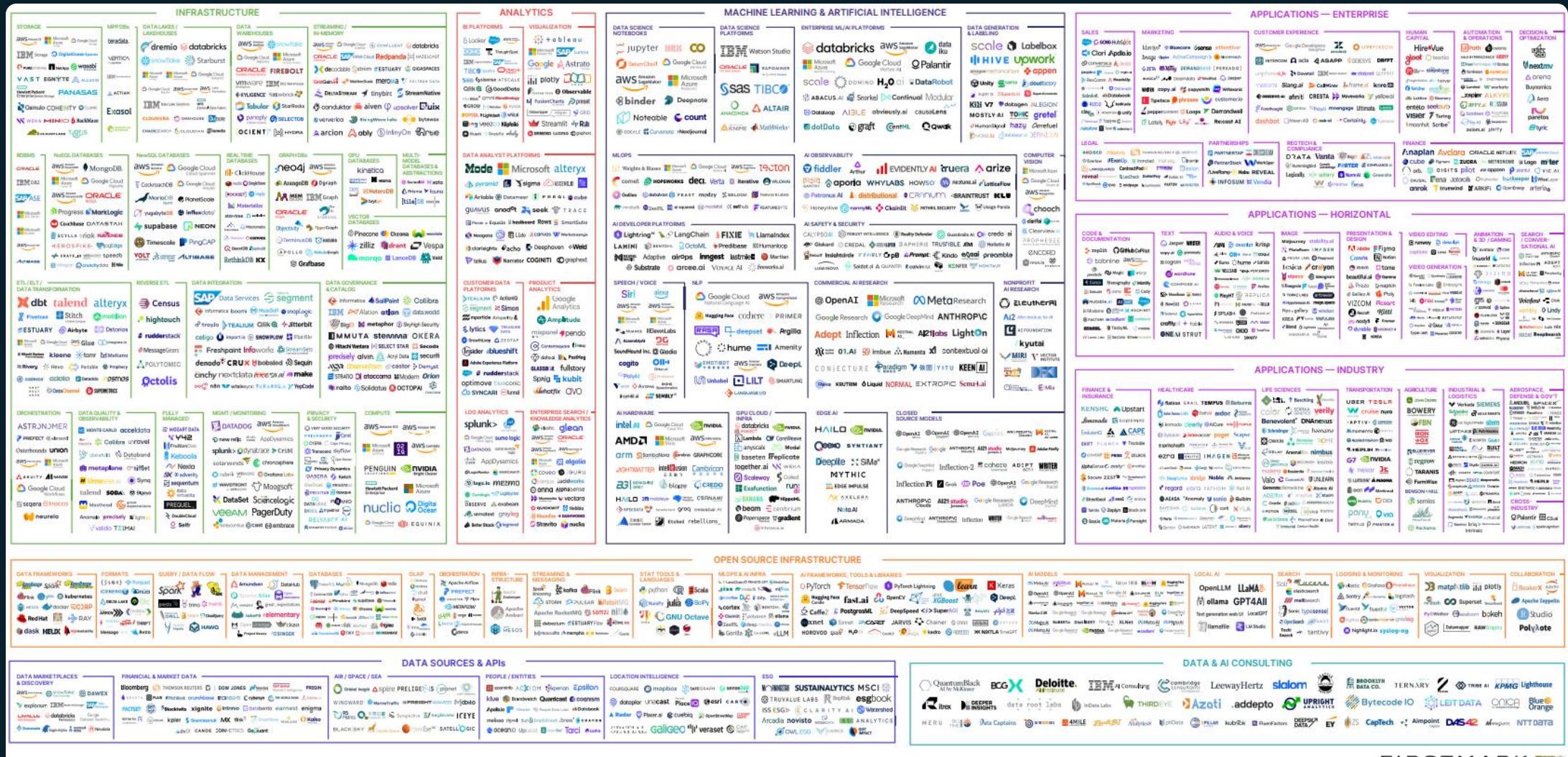
but the industry is at
the crossroads

AI is causing a massive
platform shift

But AI is only as good as
your data

Massive **fragmentation** of the
modern data stack

2024 Data and AI Landscape



“

Unify,

I am the Chief Information Officer and don't want to be the Chief Integration Officer.
Help me unleash AI in my data estate.”

Every CIO, Every Enterprise



Microsoft Fabric

The unified data platform for the era of AI

From

Isolated components

Single database

Gen AI bolted-on

To

Unified stack

All the data

Gen AI built-in





Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data



Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data



Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data



Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data



Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data



Microsoft Fabric

The unified data platform for the era of AI



Data
Factory



Data
Engineering



Data
Warehouse



Data
Science



Real-Time
Intelligence



Power BI



AI



OneLake



Purview

SaaS

"It just works"

5x5

Frictionless onboarding

Instant Provisioning

Quick results w/ Intuitive UX

Success
by Default

Minimal knobs

Auto optimized

Auto Integrated

Centralized
Administration

Tenant-wide governance

Centralized
security management

Compliance built-in

Demo

Unified data platform for
every team at any scale



Microsoft Fabric



Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data

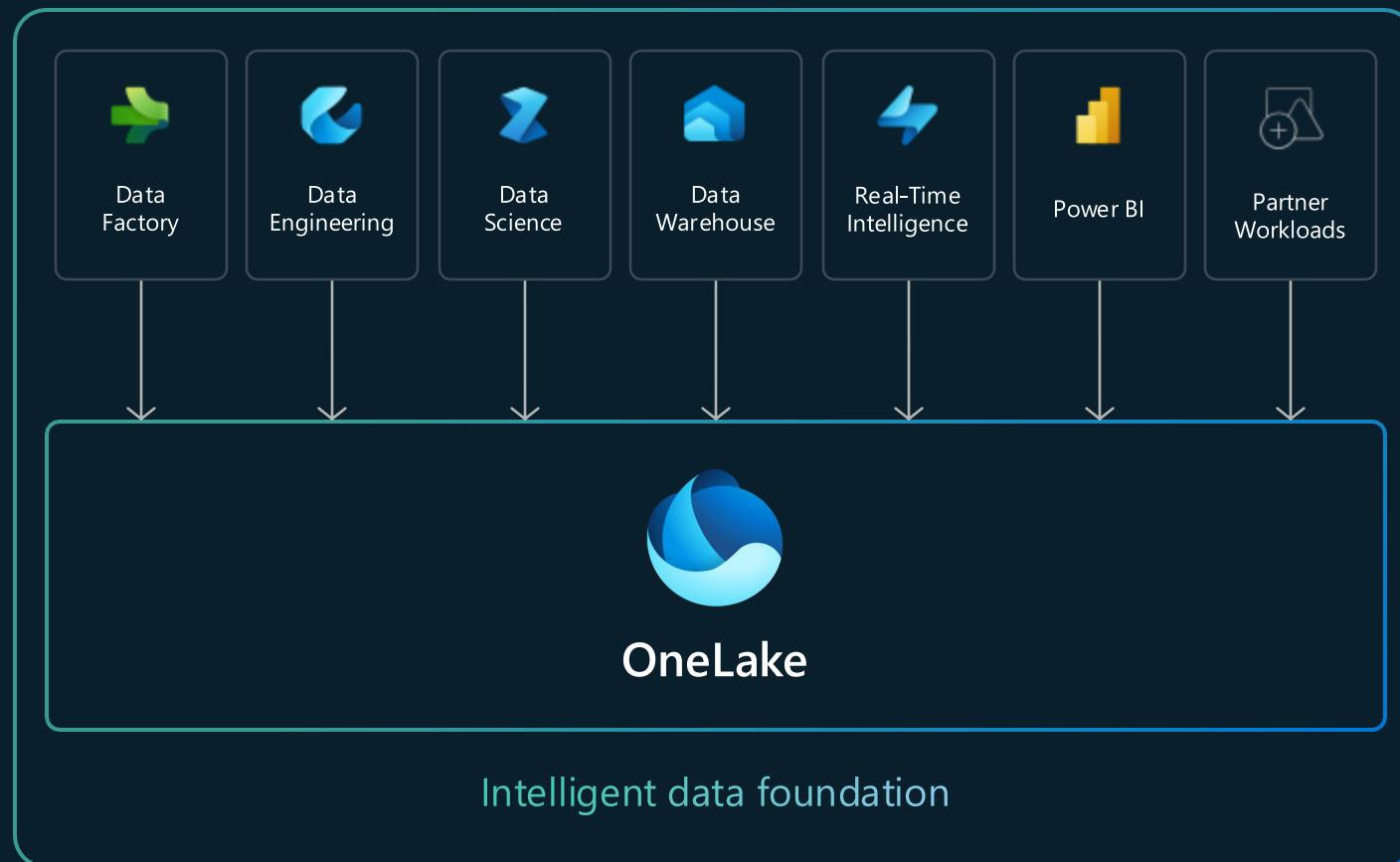
**“The OneDrive
for Data”**



OneLake

OneLake for All Data

“The OneDrive for Data”



A single SaaS lake for the whole organization

Provisioned automatically with the tenant

All workloads automatically store their data in the OneLake workspace folders

All the data is organized in an intuitive hierarchical namespace

The data in OneLake is automatically indexed for discovery, MIP labels, lineage, PII scans, sharing, governance and compliance

Unifying data in OneLake

Data Factory

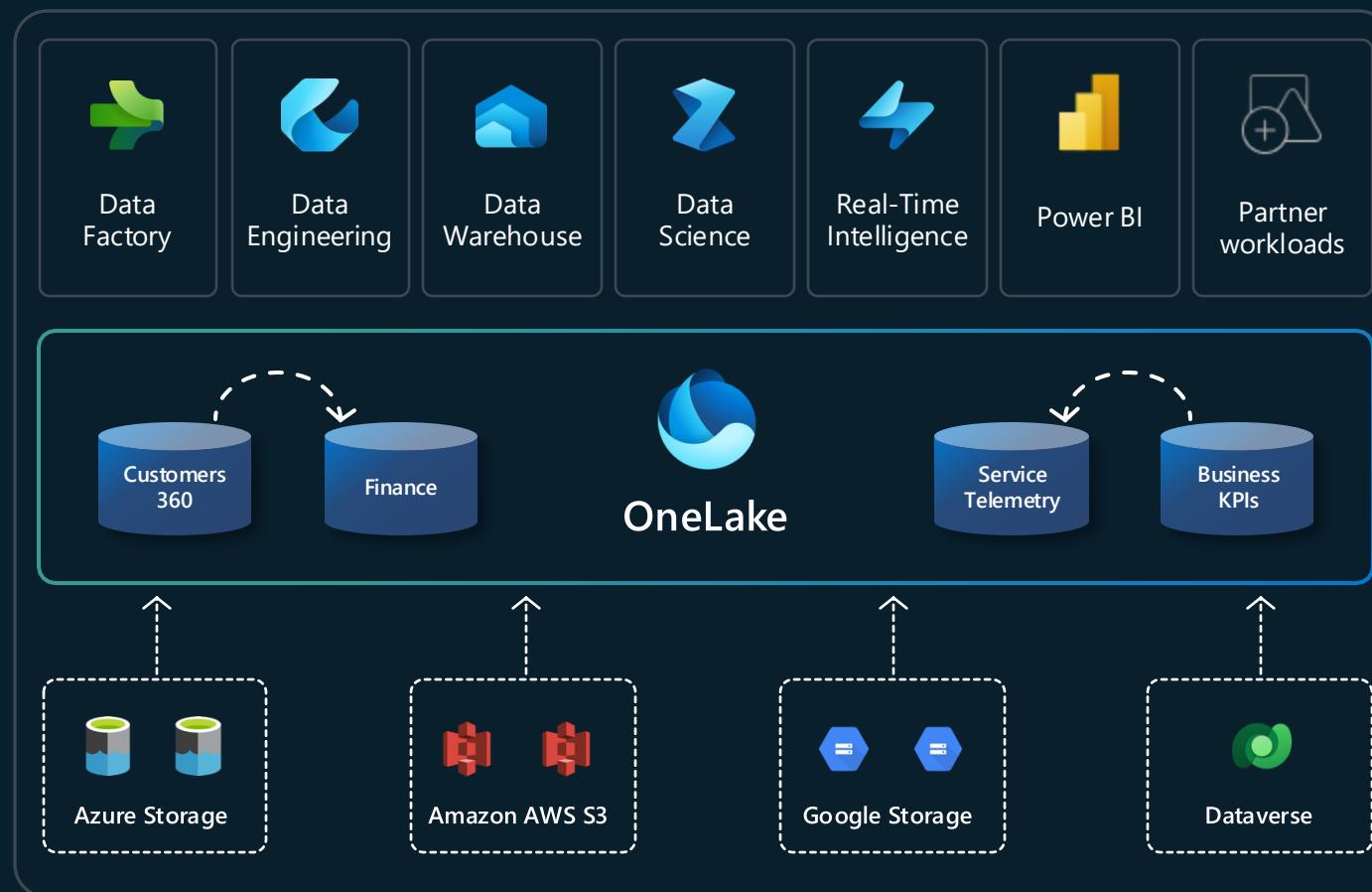
Seamlessly connect to
more than 170+ data stores



Azure Database for PostgreSQL	Azure Databricks Delta Lake	Amazon RDS for Oracle	Amazon RDS for SQL Server	Amazon Redshift	Phoenix	PostgreSQL	Presto	Magento (Preview)
Azure SQL Database	Azure SQL Database Managed Instance	Apache Impala	Azure SQL Database Managed Instance	DB2	SAP BW	SAP BW	SAP HANA	Oracle Eloqua (Preview)
Azure Table Storage	MongoDB Atlas	Drill	Google AdWords	Google BigQuery	SAP TABLE	SQL server	Spark	PayPal (Preview)
Azure Cosmos DB (MongoDB API)	Azure Cosmos DB (SQL API)	Greenplum	HBase	Hive	Amazon S3	Amazon S3 Compatible	FTP	SAP Cloud For Customer
Azure Data Lake Storage Gen1	Azure Data Lake Storage Gen1 for Cosmos Structured Stream	Informix	MariaDB	Microsoft Access	File system	Google Cloud Storage (S3 API)	HDFS	Salesforce Marketing Cloud
Azure Data Lake Storage Gen2 for Cosmos Structured Stream	Azure Database for MariaDB	MySQL	Netezza	Oracle	HTTP	Oracle Cloud Storage (S3 API)	SFTP	Shopify (Preview)
teradata.	VERTICA	ODBC	OData	REST	Amazon Marketplace Web Service	Concur (Preview)	Dataverse (Common Data Service for Apps)	Web Table
Jira	Kusto	SharePoint Online List	Dynamics 365	Dynamics AX	Dynamics CRM	Cassandra	Couchbase (Preview)	MongoDB

Unifying data in OneLake

Multi-Cloud Shortcuts



Sharing data in OneLake is as easy as sharing files in OneDrive, removing the needs for data duplication

With [shortcuts](#), data throughout OneLake can be composed together without any data movement

Shortcuts also allow instant linking of data already existing in Azure and in other clouds, without any data duplication and movement, making OneLake the first multi-cloud data lake

With support for industry standard APIs, OneLake data can be directly accessed by any application or service

Public preview

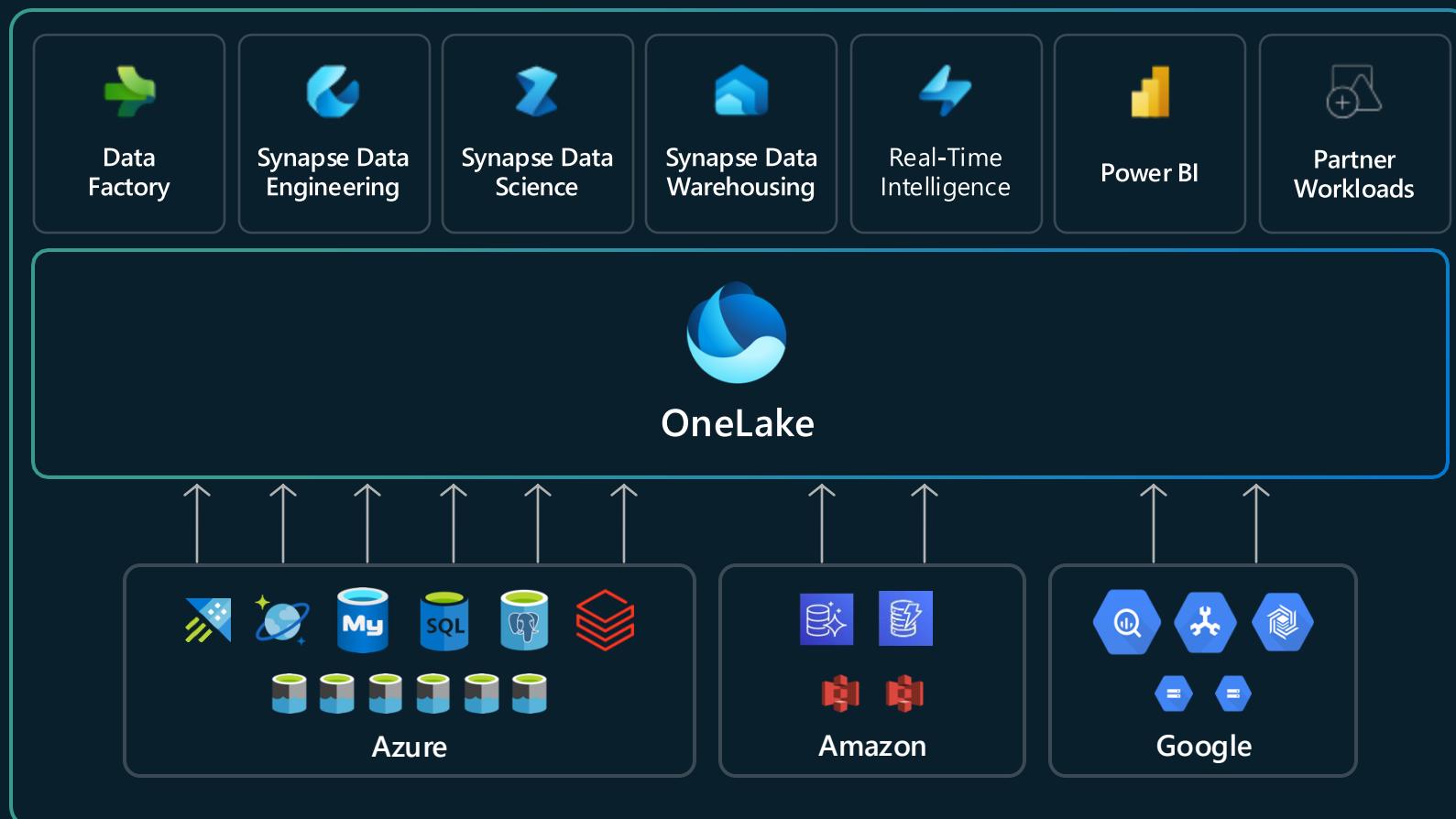
Shortcuts to On-Premises Sources



OneLake

Unifying data in OneLake

Mirroring of External Databases



Factionless linking of external databases, with full replicas created with a couple of clicks

Available for both multi-cloud and on-premises databases

Real time updates of the replicas using the CDC feeds of the database

Data is stored in Delta Parquet tables, with all Fabric services instantly available

Free Mirroring Storage for Replicas



OneLake



OneLake



Delta Lake
Format



OneLake



Delta Lake
Format

Announcing



Iceberg
Format

Transparent simultaneous support for Delta
Lake and Iceberg formats

Do more with your data with open standards

Iceberg support in OneLake

Bi-directional data access

Seamless access from M365

Demo: OneLake for all your data



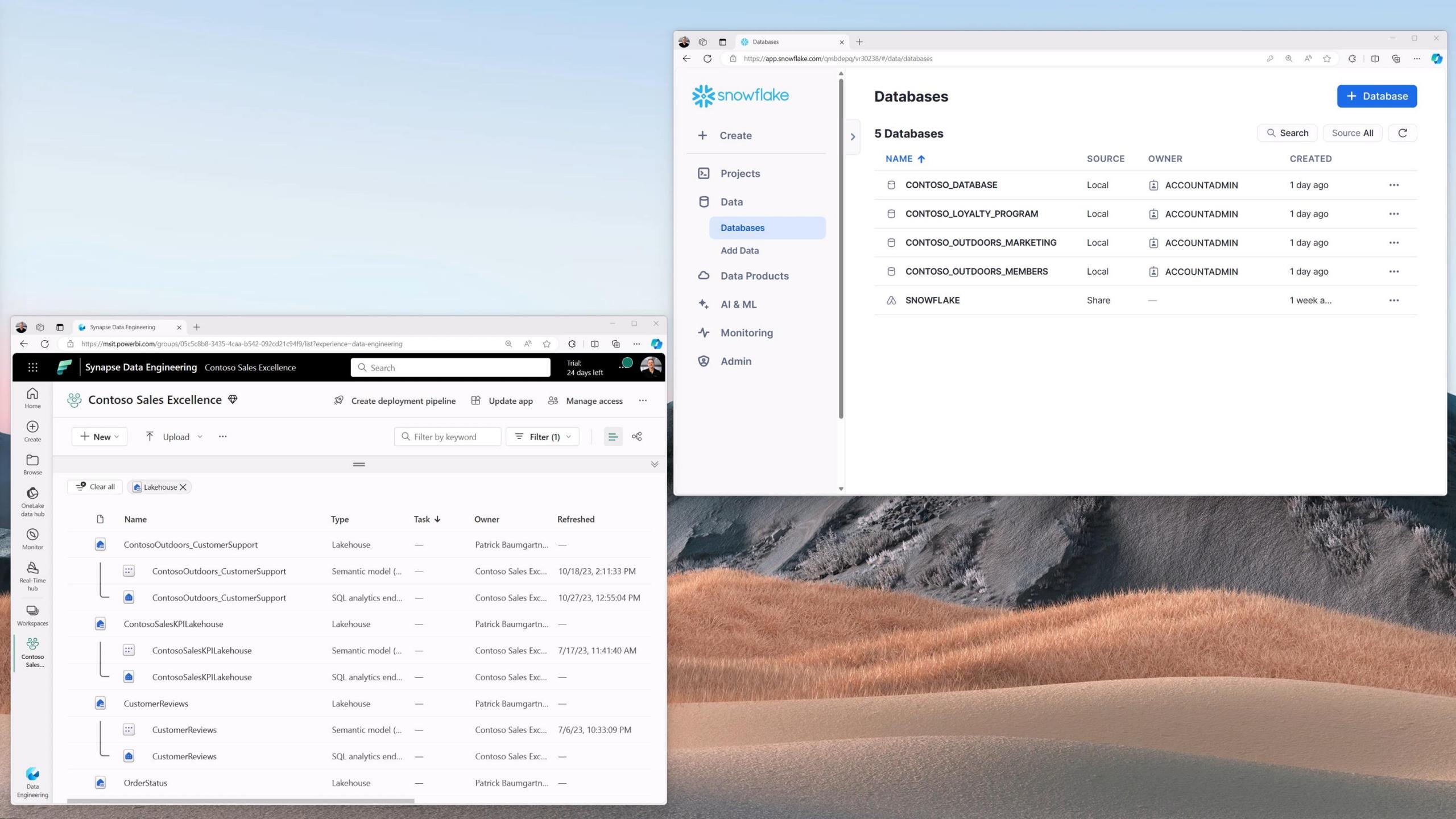
Microsoft Fabric



Snowflake



OneLake





Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

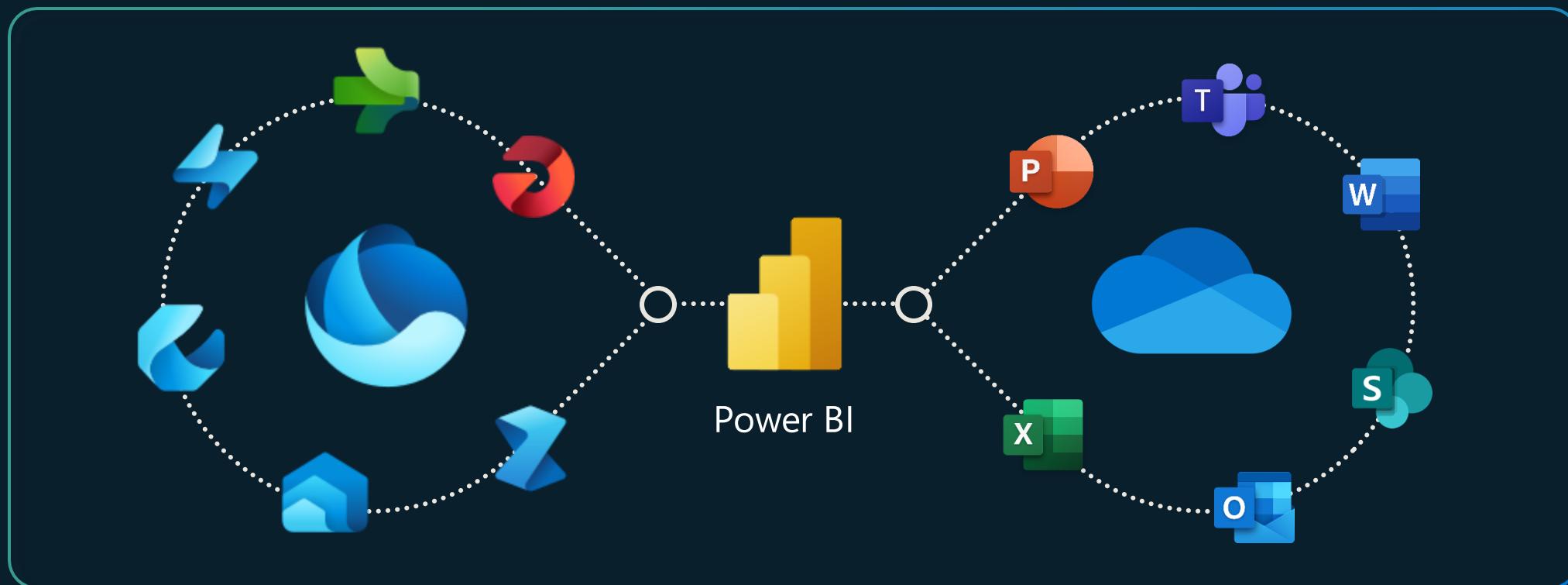
AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data

Unified Data Culture



Announcing



Real-Time Intelligence



Real-Time Intelligence in Microsoft Fabric



Best-in-class Connectivity



Real-Time
hub



Process



Analyze



Monitor



Act



AI-powered Intelligence



Contoso Operations

Create app Manage access Workspace settings

+ New

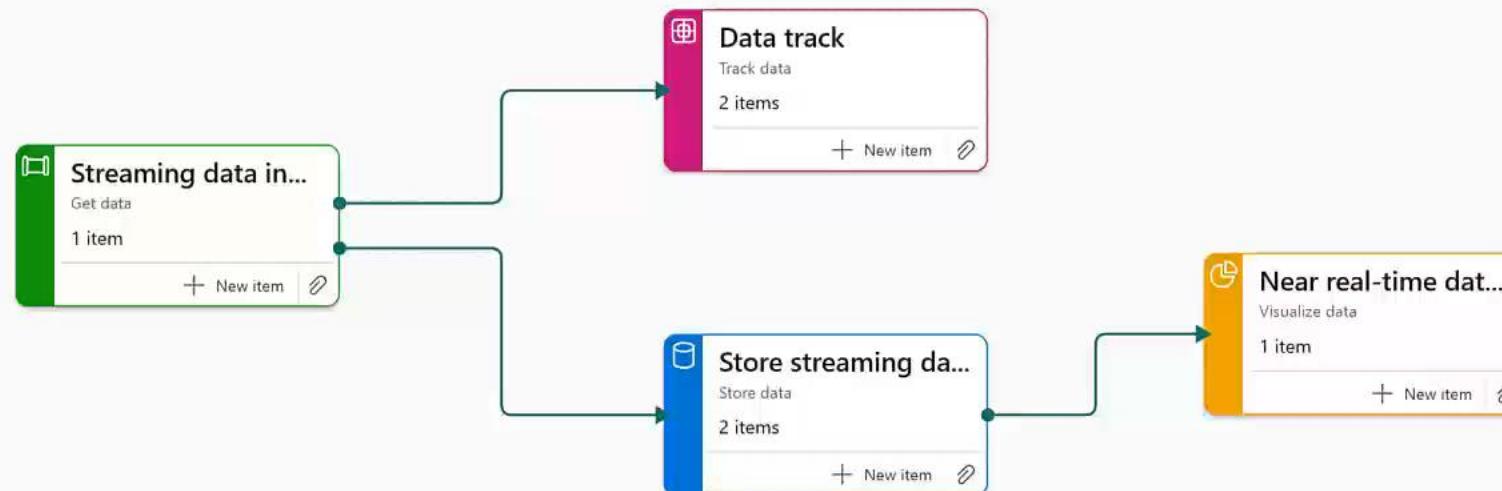
Upload

Add (preview)

Filter by keyword

Filter

Filter



Event analytics

Task flow details

Seamlessly integrate both real-time and time-based data into a unified system. Ingest data from diverse sources to extract valuable insights and promptly respond to changing conditions. This empowers data-driven decisions based on the most up-to-date information available.

Edit

Tasks

4 Tasks

- Streaming data ingest
- Store streaming data
- Data track
- Near real-time data visual...

	Name	Type	Task	Owner	Refreshed	Next refresh	Endorsement	Sensitivity	Included in app
	Routes	Eventstream	Streaming data ingest	Tessa Kloster (PAL...	—	—	—	Confidential\Micro...	①
	Operations	Eventhouse	Store streaming data	Tessa Kloster (PAL...	—	—	—	Confidential\Micro...	①
	Operations	KQL Database	Store streaming data	—	—	—	—	Confidential\Micro...	①
	Deliveries	Real-Time Dashboard	Near real-time data visualization	Tessa Kloster (PAL...	—	—	—	Confidential\Micro...	①
	ExploreDeliveries	KQL Queryset	Data track	Tessa Kloster (PAL...	—	—	—	Confidential\Micro...	①
	ExploreDeliveriesQS	KQL Queryset	Data track	Tessa Kloster (PAL...	—	—	—	Confidential\Micro...	①



Microsoft Fabric

The unified data platform for the era of AI

Complete Analytics Platform

Everything, unified

SaaS-ified

Secured and governed

Lake Centric and Open

OneLake

One copy

Open at every tier

Empower Every Business User

Familiar and intuitive

Built into Microsoft 365

Insight to action

AI Powered

Copilot accelerated

AI-driven insights

Gen AI on your data

AI Powered

Gen AI accelerates your data journey in Fabric



Copilot accelerated
experiences

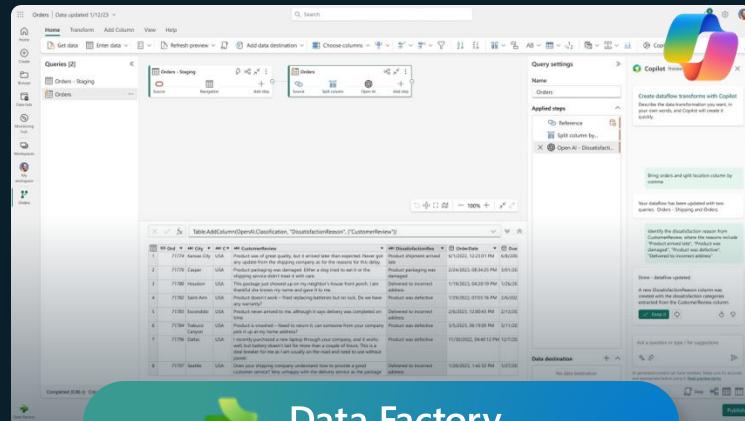


AI-driven
insights

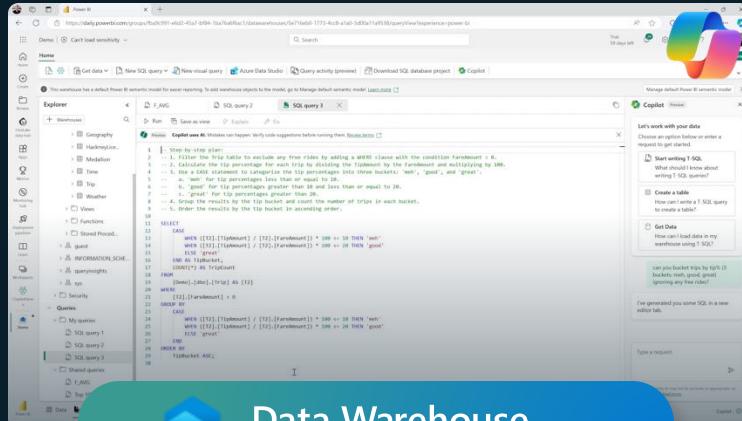


Custom
generative AI
for your data

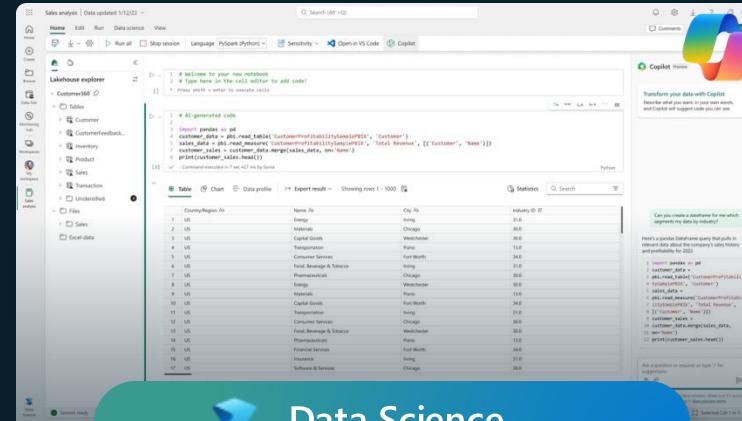
Copilot Integrated in every Microsoft Fabric Experience



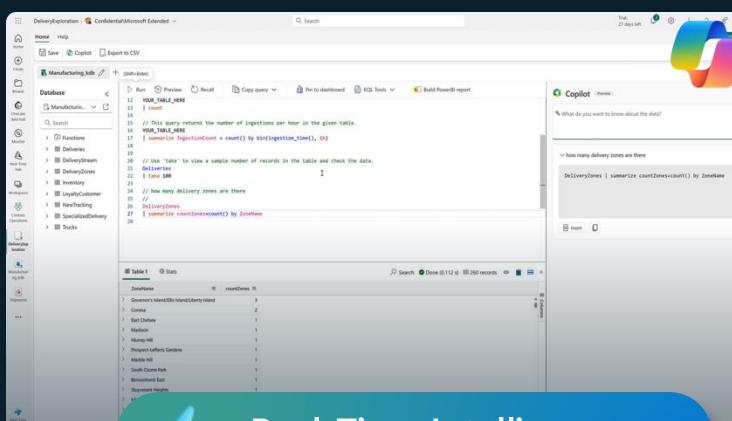
Data Factory



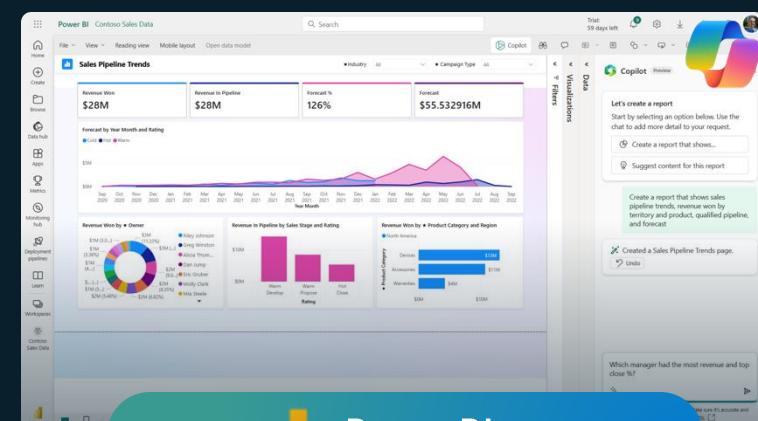
Data Warehouse



Data Science



Real-Time Intelligence



Power BI

AI Powered

AI driven Insights

Microsoft DXT | Contoso Customer Loyalty Program | Confidential\Microsoft Extended | Search | Trial: 59 days left | Copilot | ...

Contoso Outdoors Customer Loyalty Program Overview

Country: All

Filters

Active Loyalty Members: 71K (MoM% Change 1.35%)

New Loyalty Members (Last 30 Days): 1.05K (MoM% Change 3.94%)

Average Lifetime Customer Value: \$10.47K (MoM% Change -1.10%)

Average of Spend in Last 3 Months: \$972.42 (MoM% Change 0.42%)

Forecast 12 Month Opportunity: \$570.53M (MoM% Change 1.78%)

Number of Loyalty Members Added and Total Loyalty Members by Source:

Loyalty Status: Platinum (12K), Gold (12K), Bronze (12K), Silver (12K), Elite (12K), VIP (11K)

All Active Members Primary Interest:

Primary Interest	Count
Camping	29K
Apparel	17K
Photography	13K
Smart Electroni...	7K
Bikes and Bike ...	6K

All Active Members by Source:

Source	Count
In Store	36K
App	16K
Web Direct	15K
Aquired in Mer...	4K
Other	1K

New Members Primary Interest:

Primary Interest	Count
Camping	439
Apparel	200
Photography	185
Smart Electroni...	118
Bikes and Bike ...	111

New Members Source (Last 30 Days):

Source	Count
App	737
In Store	200
Web Direct	80
Aquired in Mer...	26
Other	10

Copilot Preview

I can chat, answer data questions, and summarize report content. Here are some things you can try:

- Create a bulleted list of insights
- Summarize visuals on this page

Describe the summary you want or ask a question

Content created by AI may not be accurate or appropriate, so review it carefully. [Read terms](#)

90%



Generative AI on your data

Announcing Public Preview

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



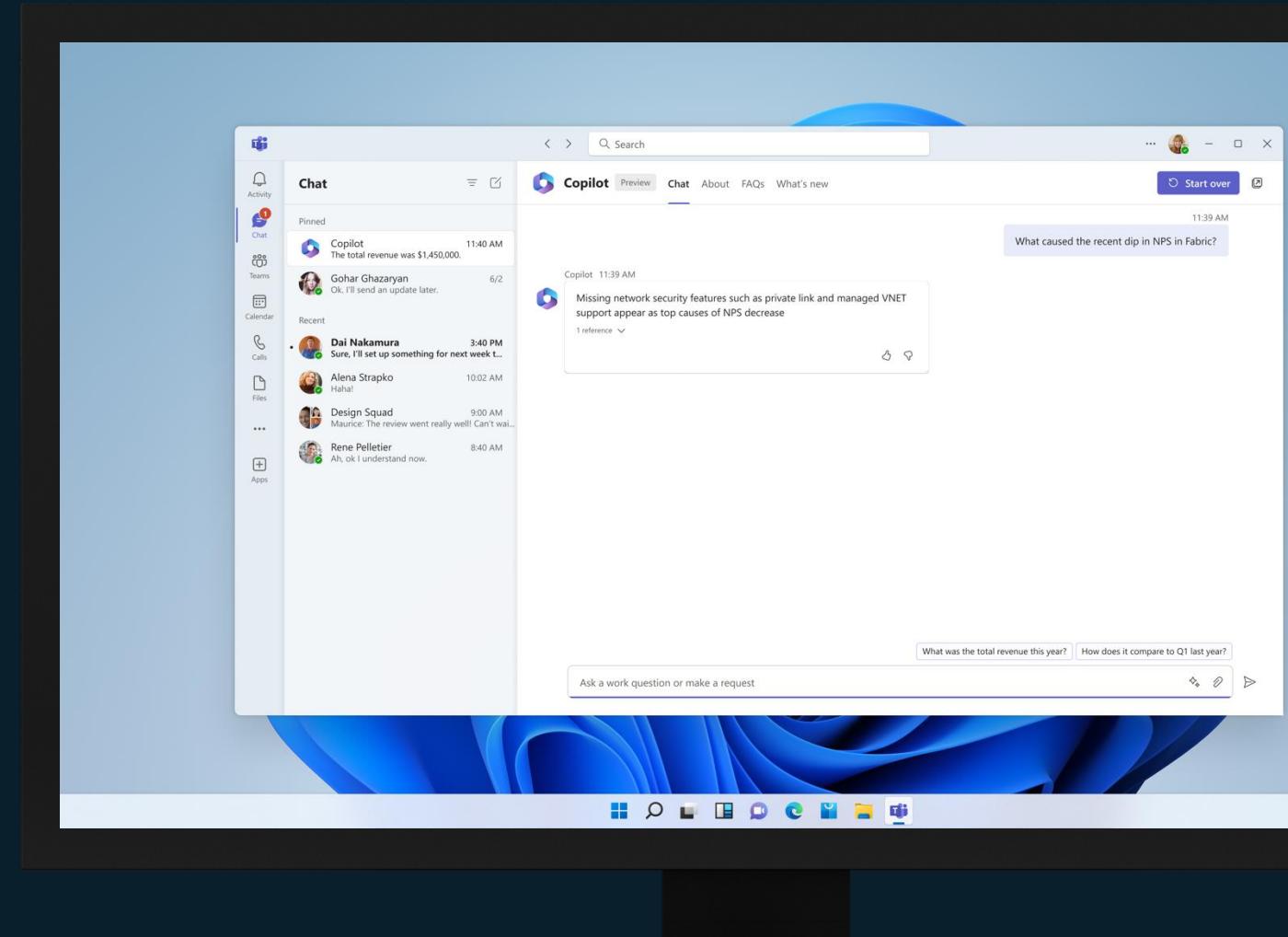
Enable custom Q&A on your data in Fabric



Define custom business semantics and grounding **unique to your org**



Scale the custom experiences to **M365 Chat, Copilot Studio, and Azure AI Studio**



Demo

AI Skills



AI Powered

Home

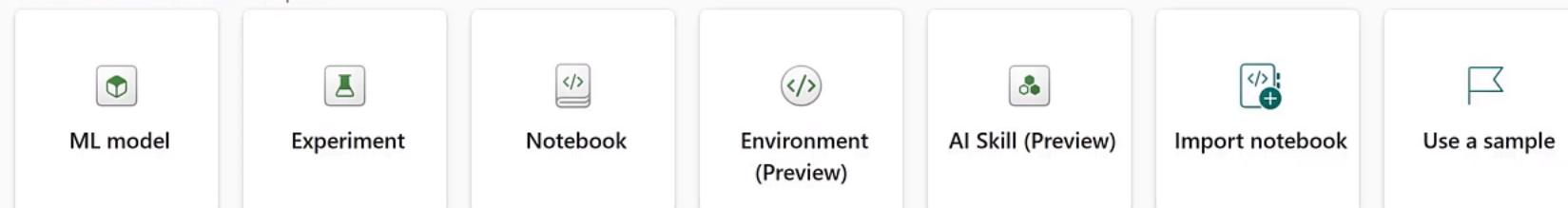


New

Current workspace: Contoso Outdoors Sales

Items will be saved to this workspace.

Show less ^



Recommended



My workspace
You frequently open this

Notebook 6
You frequently open this

Contoso Sales Excellence
You frequently open this

Copilot Demo
You frequently open this

[Open](#)

[Open](#)

[Open](#)

[Open](#)

Quick access

Recent

Favorites

Filter by keyword

Filter ▾

	Name	Type	Opened	Owner	Endorsement	Sensitivity	Location
	Contoso Outdoors Sales	Workspace	now	—	—	—	Workspaces
	Contoso Sales Excellence	Workspace	now	—	—	—	Workspaces



Microsoft Fabric

The unified data platform for the era of AI



Data
Factory



Data
Engineering



Data
Warehouse



Data
Science



Real-Time
Intelligence



Power BI



Partner
workloads



AI



OneLake



Purview

Rapid pace of innovation: **Weekly Fabric Releases**



What's coming next?

aka.ms/FabricRoadmap

Microsoft Fabric Career Hub

aka.ms/FabricCareerHub

Microsoft Fabric Trial

aka.ms/try-fabric