



Microsoft

Microsoft Fabric

A collection of abstract, semi-transparent 3D geometric shapes, including cubes, spheres, and hexagonal prisms, rendered in a gradient of blue, cyan, and yellow. They are scattered across the left side of the slide, overlapping a faint background grid.

Unify your Data & Analytics
Platform on Azure

Hands on workshop
Tyler.Becker@Microsoft.com

Participant Sign up

Event Reminder: Please note the following items

1. This session will be offered in English.
2. Participants should bring their own laptops to access the lab environments during the workshop for the best experience.
3. To avoid any RDP issues during the actual workshop, we ask that you check your access to the Hands-on Labs (HOLs) before the actual workshop day.

The test lab test below will be accessible for a brief period of 10 minutes.

VM RDP Test Lab Activation Details: -

Sign-up link: <https://bit.ly/4jmQvHd>

Activation code: ACTIVATE50548

Getting Started

Checklist

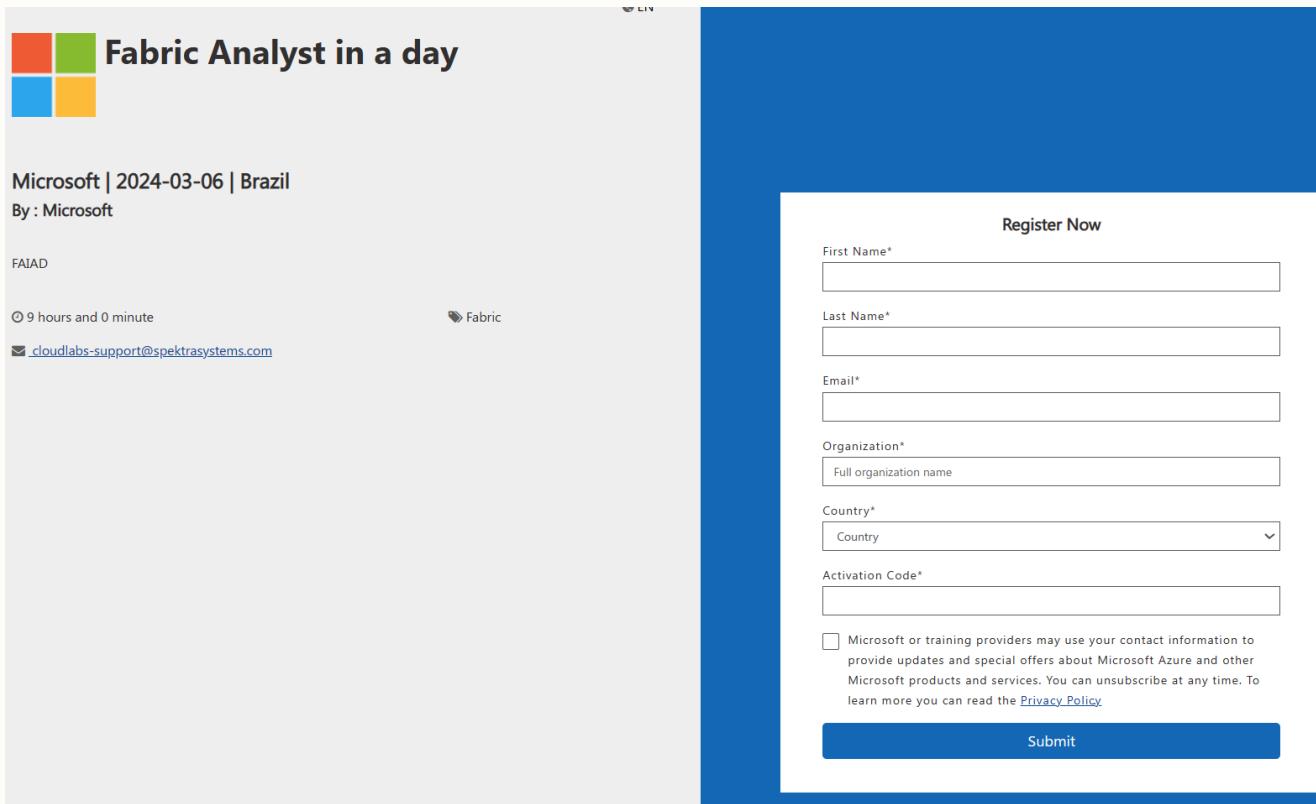
- Connect to Wi-Fi (MSFTGuest)
- Select “Event Attendee Code”
- Wi-Fi Password: **fabric3**
- Register for hands on lab (link below)
- Hands-on Lab : **<https://bit.ly/4jmQvHd>**
- Lab Activation code: **ACTIVATE50548**
- Lab Guide : Included in the lab environment

Update fields in red prior to your workshop. You will have a unique link and activation code provided for your workshop

Agenda

Morning	Presentation	Topics / Labs
08:30 AM – 09:00 AM	Check in & Breakfast	-
09:00 AM – 09:20 AM	Keynote	Tech Evolution – Vision of open lakes for Analytics
09:20 AM – 10:00 AM	Technical Demo	Featuring key Fabric capabilities
10:00 AM – 10:15 AM	Break	
10:15 AM – 11:30 PM	Microsoft Fabric Hands-on workshop	Hands on Labs 1-3
11:30 PM – 12:30 PM	Lunch & Networking	
12:30 PM – 03:40 PM	Microsoft Fabric Hands-on workshop	Hands on Labs 4 – 7
03:40 PM – 03:55 PM	Expert Q/A Panel	Cloud Scale Analytics - MS SMEs
03:55 PM – 04:00 PM	Next steps, resources & close	

Participant Sign up



Fabric Analyst in a day

Microsoft | 2024-03-06 | Brazil
By : Microsoft

FAIAD

0 hours and 0 minute

 [Fabric](#)

[clouldabs-support@spektrsystems.com](#)

Register Now

First Name*

Last Name*

Email*

Organization* Full organization name

Country*

Activation Code*

Microsoft or training providers may use your contact information to provide updates and special offers about Microsoft Azure and other Microsoft products and services. You can unsubscribe at any time. To learn more you can read the [Privacy Policy](#)

Microsoft | 2024-02-15 | United States | FAIAD Training Environment

Dear Owais Hashmi

Your Microsoft | 2024-02-15 | United States | FAIAD Training Environment On demand lab is ready. You have 72Hrs, 0Mins to try out the lab before it expires.

Here is the [Azure](#) login info and lab guide details:

On Demand Lab: Microsoft | 2024-02-15 | United States | FAIAD Training Environment

Username: odl_user_1251323@faiad2024.onmicrosoft.com

Password: Qwerty123!*

Please use the below details for future use in your labs:

labvm-1251323 :

Name	Value
deployment ID	1251323
snowFlake Username	TE_SNOWFLAKE
snowFlake Password	8UpfRpExVDXv2AC
adls storage account URL	https://stvnextblobstorage.dfs.core.windows.net/fabrikam-sales/Delta-Parquet-Format
adls	.

Participant Sign up

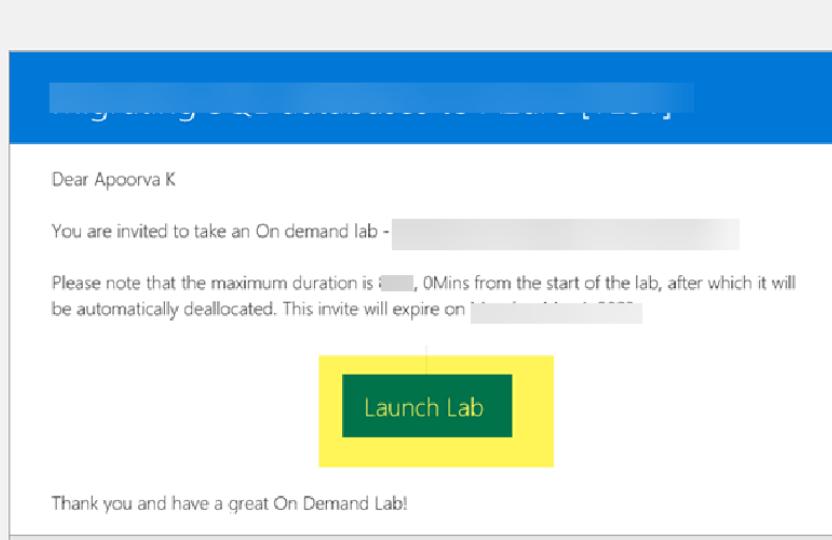
Invite for On demand lab - [REDACTED]



CloudLabs <noreply@cloudlabsai.net>

To: Apoorva K

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.



Try the new experience EN

Fabric - Analyst in a day
[REDACTED] hour(s), 36 minute(s) remaining

[Lab Guide](#) [Environment Details](#) [Resources](#) [Help](#)

Microsoft Fabric - Fabric Analyst in a Day - Lab 1

[Microsoft Fabric](#)
[Fabric Analyst in a Day](#)
[Lab 1](#)



Contents

- Document Structure
- Scenario / Problem Statement
- Overview of Power BI Desktop Report
 - Task 1: Set up Power BI Desktop in Lab environment
 - Task 2: Analyze Power BI Desktop Report

Survey

Unify your Data & Analytics
Platform on Azure Workshop





Microsoft

Microsoft Fabric

A collection of abstract, semi-transparent 3D geometric shapes, including cubes, hexagons, and circles, in shades of blue, cyan, and yellow, floating against a white background.

Unify your Data & Analytics
Platform on Azure

Hands on workshop

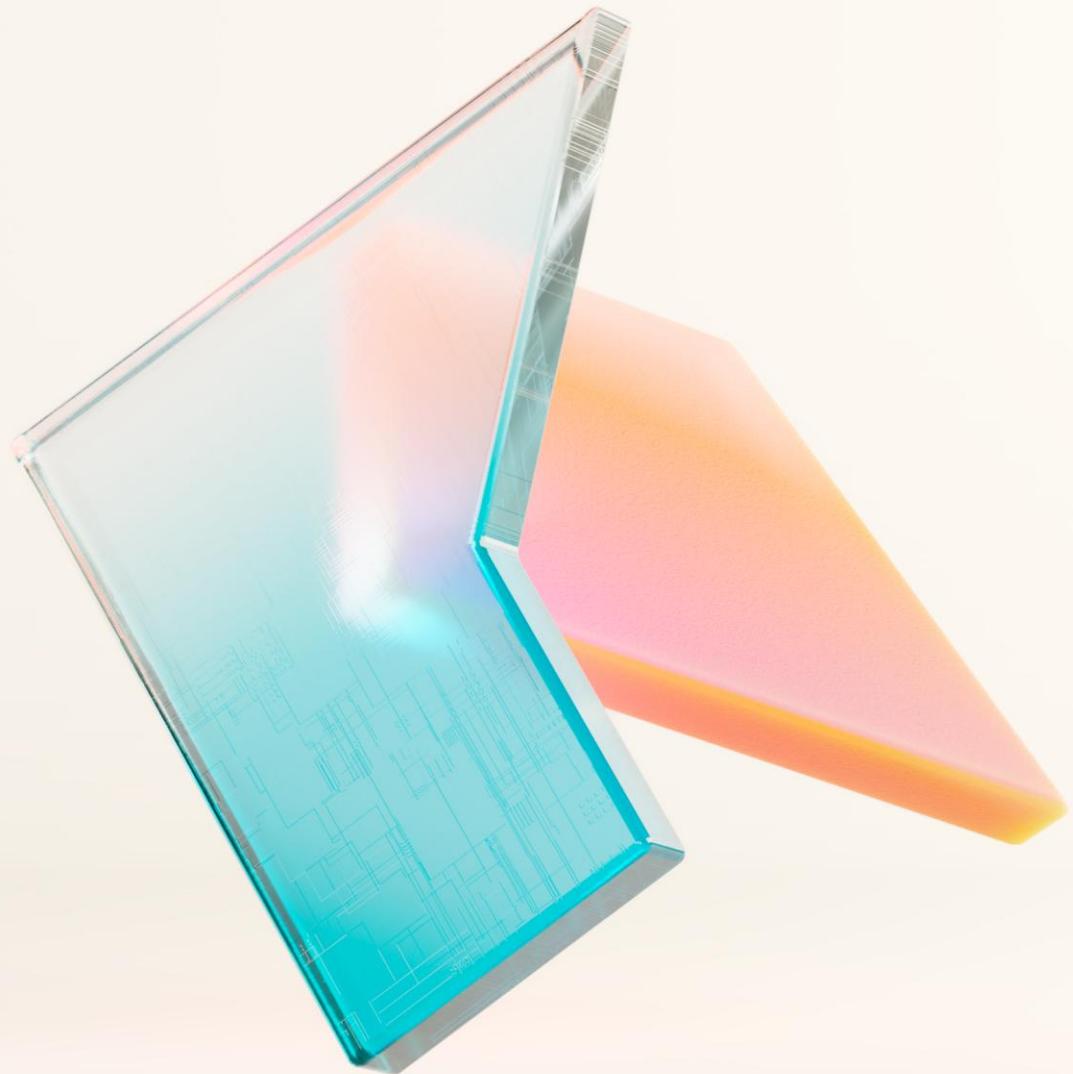
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Getting Started

Checklist

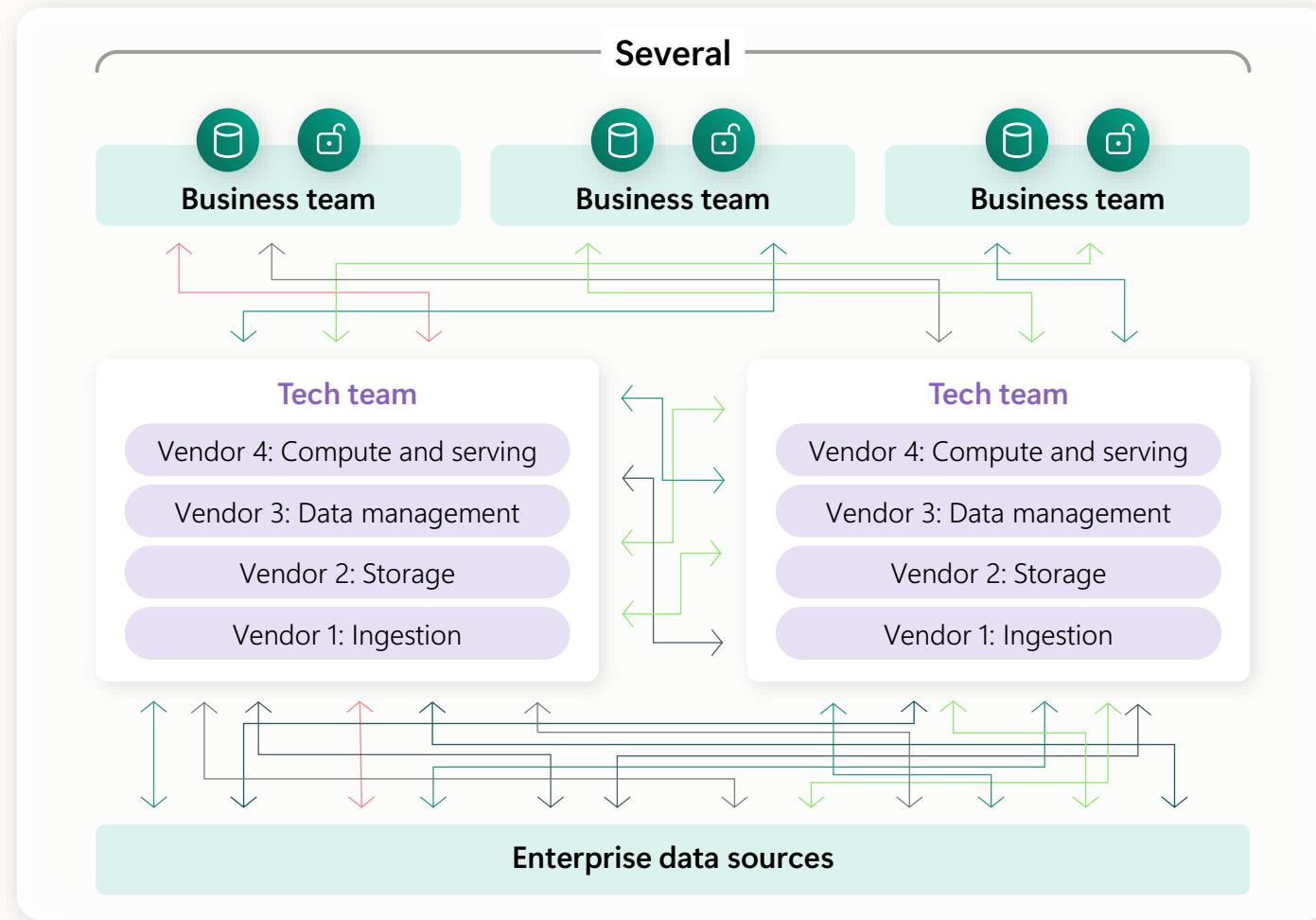
- Connect to Wi-Fi (MSFTGuest)
- Select “Event Attendee Code”
- Wi-Fi Password: **Event1505**
- Register for hands on lab (link below)
- Hands-on Lab : <https://bit.ly/3UOwBLR>
- Lab Activation code: **ACTIVATE40438**
- Lab Guide : Included in your lab environment



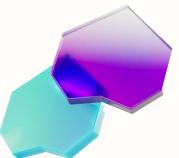
Keynote

The starting line

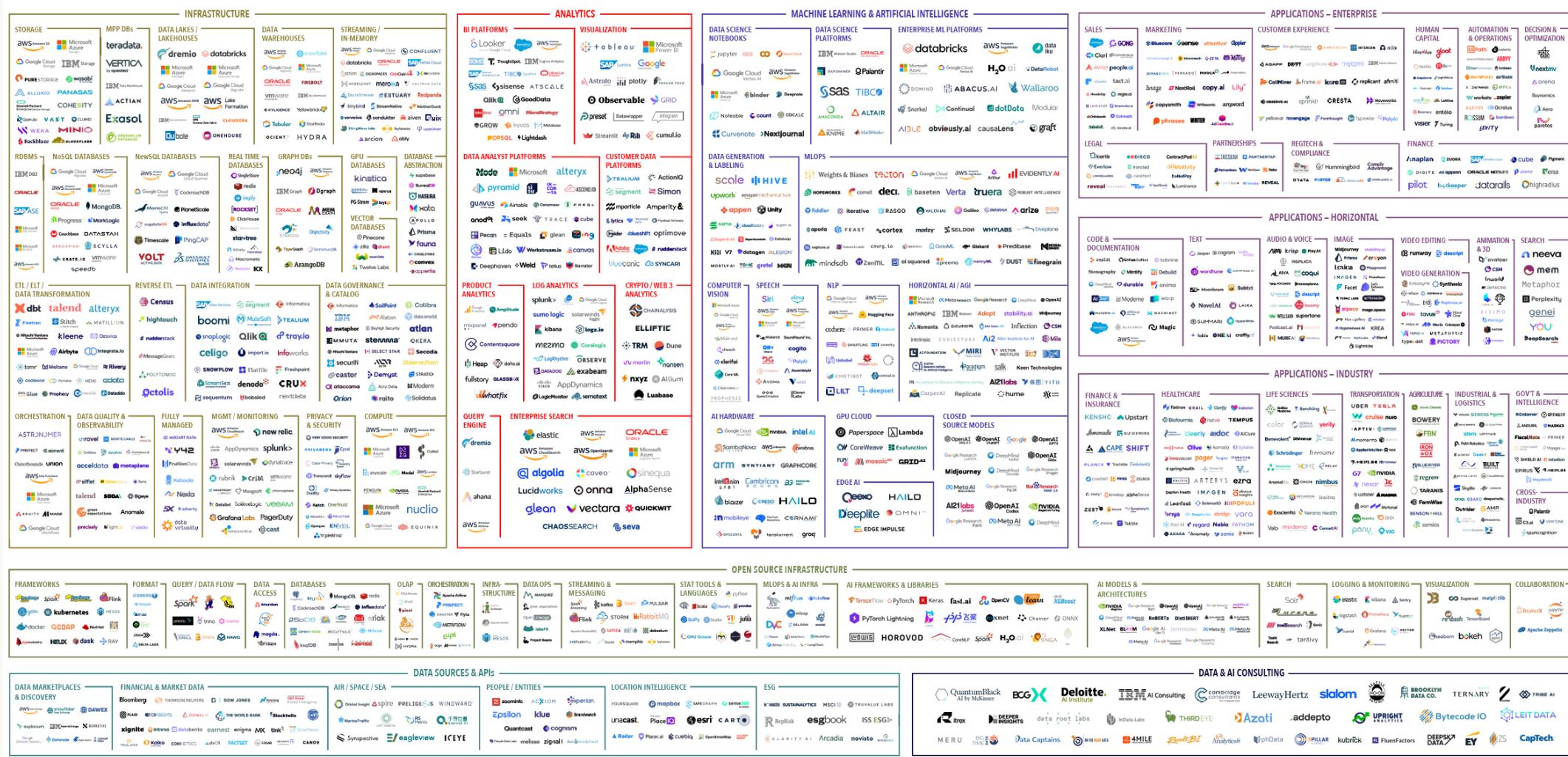
A complex, organically evolved data estate



- 1 Data copies and infrastructure inefficiencies
- 2 Limited interoperability between vendor services
- 3 Data exposure risks



Customers enhancing their data estate face immense complexity



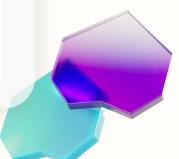
Version 1.0 - Feb 2023

© Matt Turck (@mattturck), Kevin Zhang (@kevinzhang) & FirstMark (@firstmarkcap)

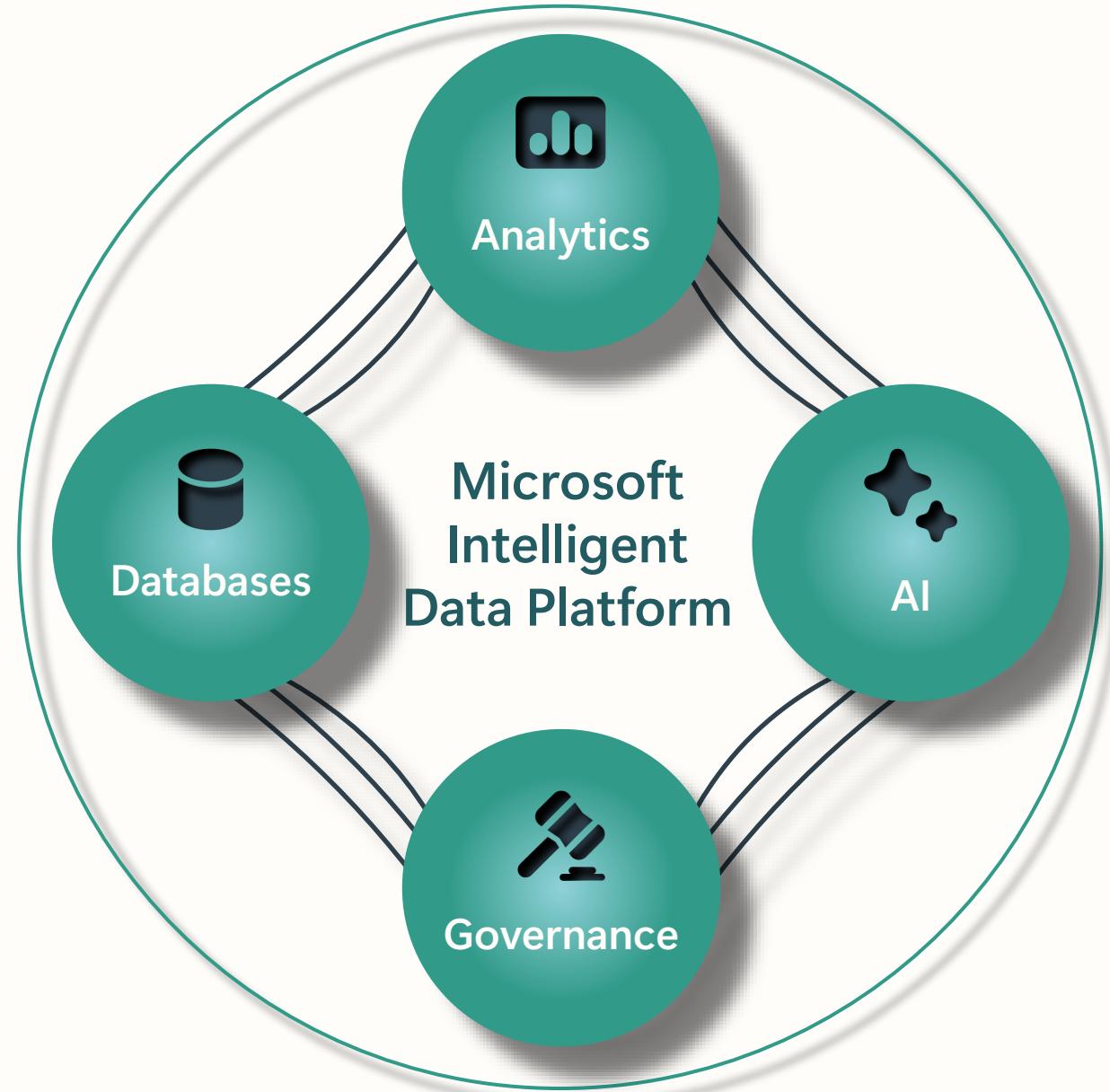
Blog post: mattturck.com/MAD2023

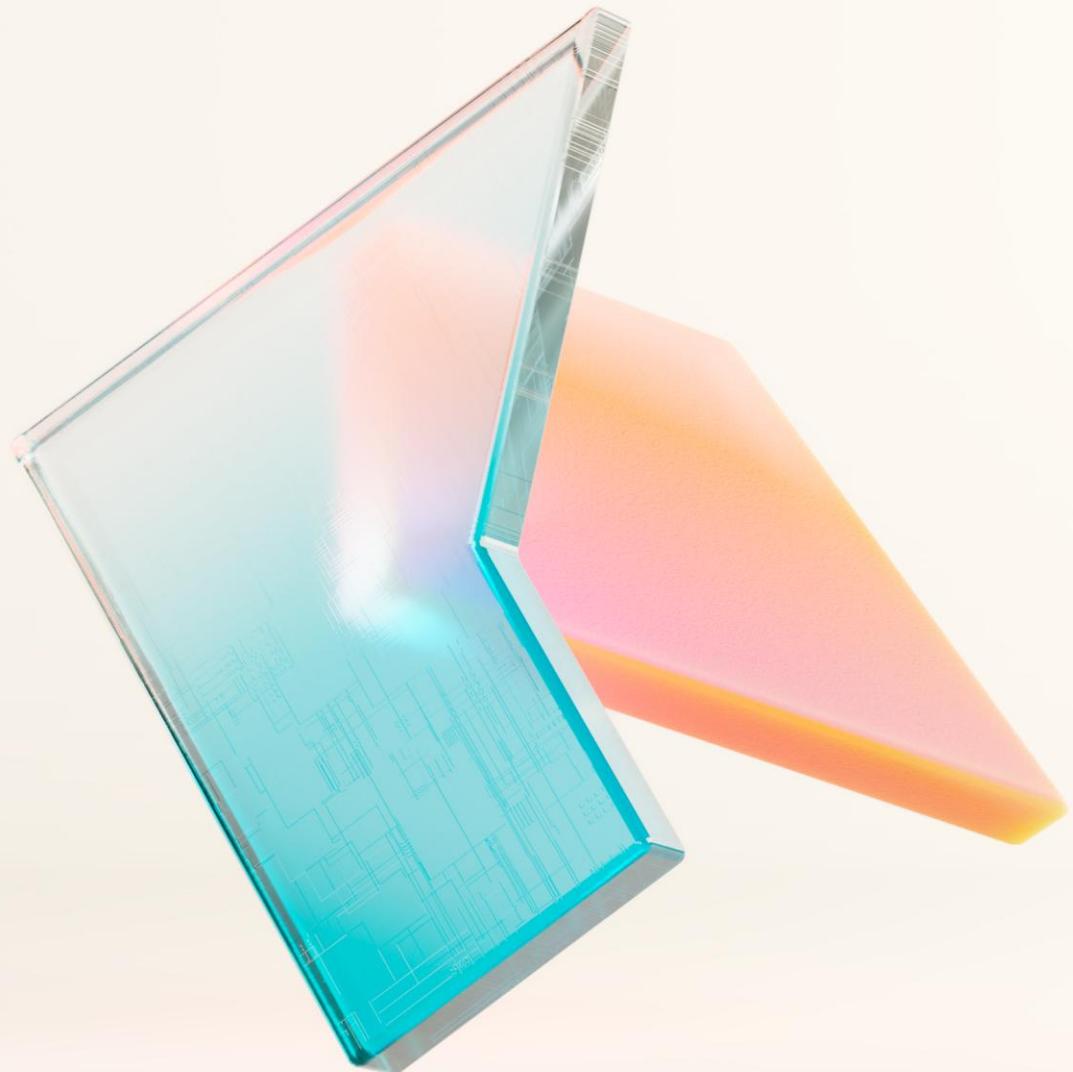
Interactive version: MAD.firstmarkcap.com

Comments? Email MAD2023@firstmarkcap.com



Leverage
everything
Microsoft has
to offer





Introducing
Microsoft Fabric

375K+

Power BI customers

95%

Fortune 500 companies
use Power BI

30M+

Power BI MAU

7M+

Power BI developers

10 years of
rapid growth!



Fabric
6.1.2023



Power BI
7.24.2015



Microsoft Fabric



Data
Factory



Real-Time
Intelligence



Databases



Analytics



Industry
Solutions



Power BI



Partner
solutions



Copilot in Fabric

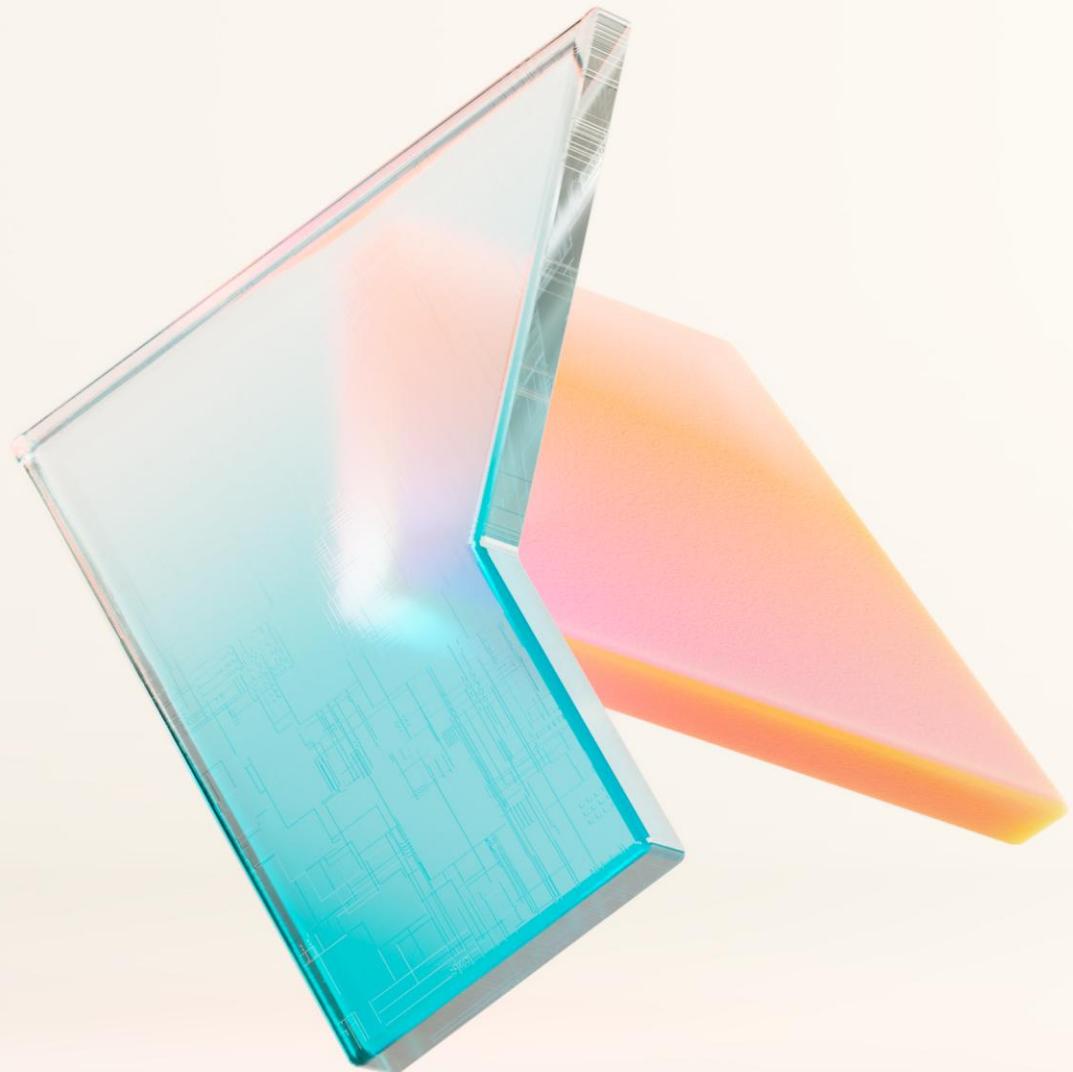


OneLake



Microsoft Purview





Microsoft Fabric
capabilities



Microsoft Fabric

The data platform for the era of AI

Complete analytics platform

Everything, unified

SaaS-ified

Secure and governed

Lake centric and open

OneLake

One Copy

Open at every tier

Empower every business user

Familiar and intuitive

Built into Microsoft 365

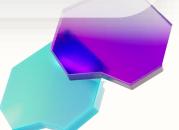
Insight to action

AI-powered experiences

Copilot accelerated

ChatGPT on your data

AI driven insights



Microsoft Fabric Home

Home

Microsoft Fabric

All your data. In one location. Organize. Collaborate. Create.

Explore the experience

Power BI
Find insights, track progress, and make decisions faster using rich visualizations.

Data Factory
Solve the most complex data integration and ETL scenarios with cloud-scale data movement and data transformation services.

Data Activator
Monitor data to trigger alerts and automated actions so your organization adapts to changing conditions in real time.

Synapse Data Engineering
Create a lakehouse, and use Apache Spark to transform and prepare organizational data to share with the business.

Synapse Data Science
Explore your data, and build machine learning models to infuse predictive insights into your analytics solutions and applications.

Synapse Data Warehouse
Scale up your insights by storing and analyzing data in a secure, open-data-format SQL warehouse with top performance at PB scale.

Synapse Real-Time Analytics
Rapidly ingest, transform, and query any data source and format, from 1 GB to 1 PB, and then visualize and share the insights.

Read documentation

Explore community

Starting on the Microsoft Fabric homepage,

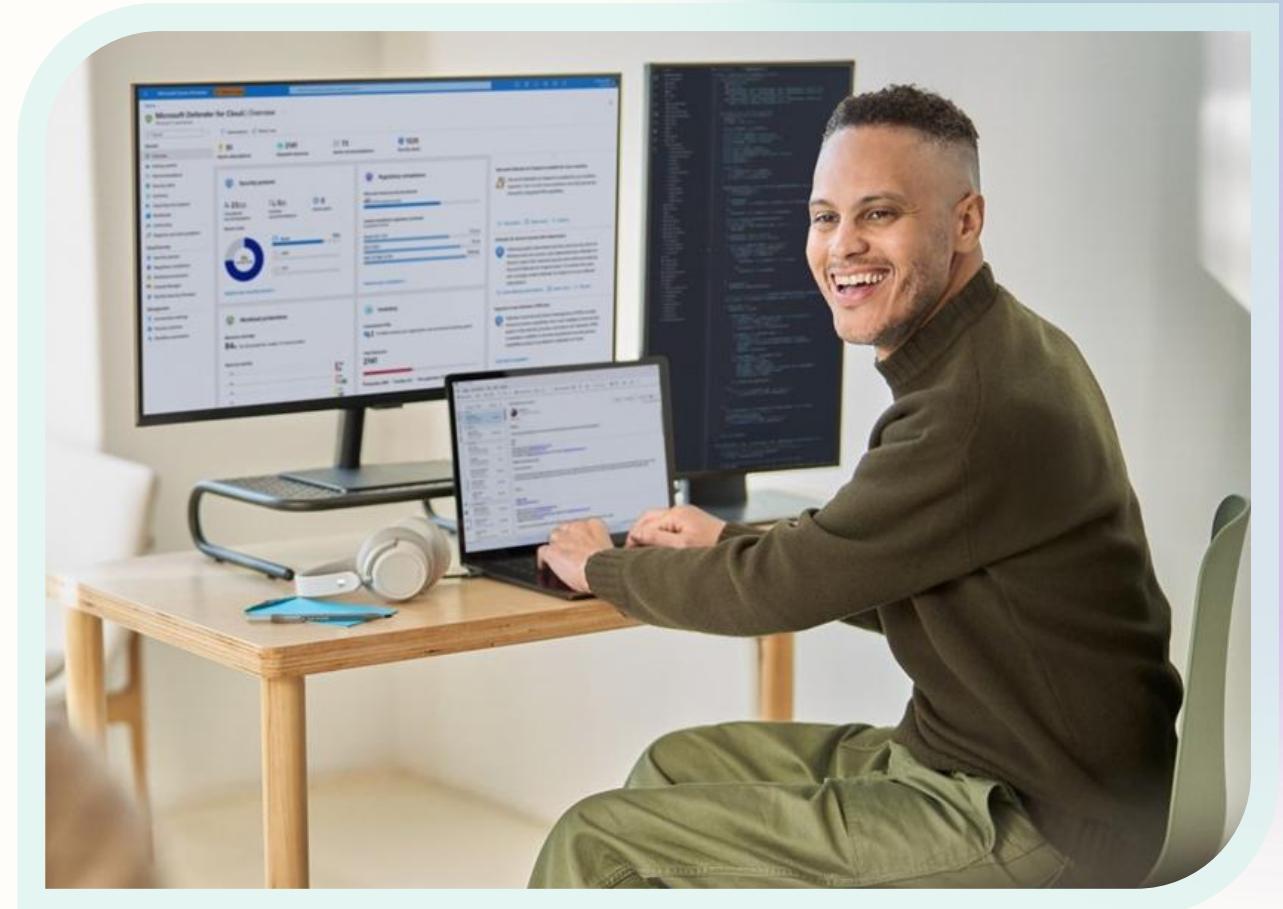
The screenshot shows the Microsoft Fabric Home page. At the top, there's a navigation bar with icons for home, settings, help, and search. Below it is a main title "Microsoft Fabric" with the tagline "All your data. In one location. Organize. Collaborate. Create.". A central heading "Explore the experience" is followed by a grid of tiles for different services: Power BI, Data Factory, Data Activator, Synapse Data Engineering, Synapse Data Science, Synapse Data Warehouse, and Synapse Real-Time Analytics. Each tile has an icon and a brief description. At the bottom, there are two buttons: "Read documentation" and "Explore community". A large, semi-transparent text box at the bottom says "Starting on the Microsoft Fabric homepage,". The overall design is clean and modern with a white background and pastel-colored tiles.

Establish a trusted data foundation



Integrate data from anywhere into a single, multi-cloud data lake for the entire organization, and work from the same copy of data across analytics engines

- Easily connect to data across clouds using “Shortcuts” to virtualize data in OneLake without having to move or duplicate the data
- Create, integrate, manage, and operate data lakes standardized on Delta Parquet format; the same open data format as Azure Databricks
- Intuitively organize your data in Microsoft Fabric’s data lake—OneLake—for central data discovery, sharing, governance, and compliance



The screenshot shows the Microsoft Fabric Data Engineering interface. At the top, there's a navigation bar with a user profile, a search bar, and a trial status (59 days left). Below the navigation bar is a toolbar with icons for Home, Create, Get data, New Power BI dataset, and Open notebook.

The main area has a sidebar titled "Explorer" containing a tree view of "MarketingCampaignAnalytics" which includes "Tables" and "Files".

The central workspace displays a message: "Get data in your lakehouse" followed by four buttons: "New Dataflow Gen2", "New data pipeline", "Open notebook", and "New shortcut".

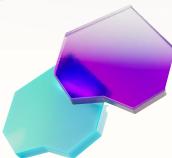
At the bottom, a large callout box states: "I have an enterprise-grade lakehouse ready to populate with data."

Empower every business user



Empower everyone to uncover insights with the data they need, easy-to-use tools, and visuals embedded in the Microsoft 365 apps they use everyday

- Quickly go from data in a lakehouse to insights in the hands of your business users
- Save time for analysts and provide up-to-date insights with Direct Lake mode, a blazing fast, real-time connection to your data in OneLake
- Foster a data-driven culture by seamlessly and securely embedded insights into Teams, Excel, PowerPoint, Outlook, and more with native integration



Microsoft Fabric

Search

Microsoft

Teams

Activity (52)

Chat (7)

Teams

Calendar

Calls

Files

Who

Power BI

...

Apps

Help

General Posts Files Notes Contoso Revenue and... +

File Export Share ...

Sales Pipeline Trends

Revenue Won \$28M

Revenue In Pipeline \$28M

Forecast % 126%

Forecast by Win/Loss Ratio \$19M

Revenue Won by MonthSort

Revenue Won by Product Category

Revenue In Pipeline by Sales Stage

Revenue Won by Owner

Revenue Won by Year

Forecast % and Forecast by Win/Loss Ratio

and review it whenever they need.

Filters

The screenshot displays a Microsoft Fabric dashboard titled "Sales Pipeline Trends". The top navigation bar includes "General", "Posts", "Files", "Notes", and "Contoso Revenue and...". Below the navigation is a toolbar with "File", "Export", "Share", and other options. The main area features several data cards and charts:

- Revenue Won:** \$28M
- Revenue In Pipeline:** \$28M
- Forecast %:** 126%
- Forecast by Win/Loss Ratio:** \$19M

Below these cards are three main sections:

- Revenue Won by MonthSort:** A line chart showing revenue trends from January to December.
- Revenue Won by Product Category:** A bar chart showing revenue for Devices, Accessories, and Warranties.
- Revenue In Pipeline by Sales Stage:** A horizontal bar chart showing pipeline distribution across Develop, Propose, and Close stages.

At the bottom left is a donut chart showing "Revenue Won by Owner" with segments for Riley Johnson, Greg Winston, Alicia Thomas, Dan Jump, Eric Gruber, and Molly Clark. At the bottom right is a line chart showing "Revenue Won by Year" from 2020 to 2022. A callout at the bottom center says "and review it whenever they need."

Customize Microsoft Copilot

with the most comprehensive end-to-end AI toolchain

Low-code

Pro-code



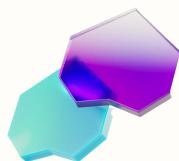
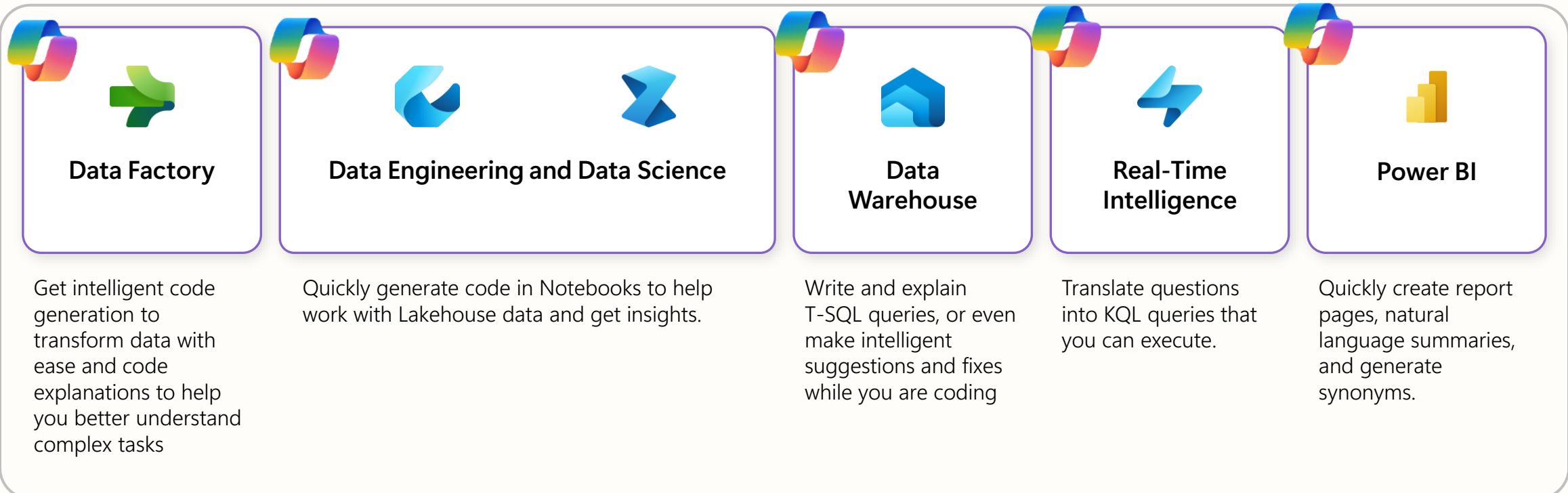
Microsoft Copilot Studio



Azure AI Studio



Copilot in Microsoft Fabric



Contoso Daily Sales | Data updated 1/12/23

Sales Overview

Date: 06/01/2022 - 01/12/2023

Revenue Won: \$7,720,093 Close %: 28.3% AVG Days to Close: 84 Opportunities Won: 334

Revenue Won by Month

The chart shows a steady increase in revenue over time, starting at approximately \$200,000 in June 2022 and reaching about \$1.5M in December 2022, before slightly dipping in January 2023.

Month	Revenue Won (\$)
June 2022	~\$200,000
Jul 2022	~\$200,000
Aug 2022	~\$500,000
Sep 2022	~\$300,000
Oct 2022	~\$700,000
Nov 2022	~\$1.2M
Dec 2022	~\$1.5M
Jan 2023	~\$1.4M

Close % by Month

The chart shows a general upward trend in closing percentage from May to November, followed by a slight dip in December and January.

Month	Close %
May	23%
Jun	32%
Jul	26%
Aug	37%
Sep	37%
Oct	36%
Nov	51%
Dec	47%
Jan	37%

Close % by Region

A map of the United States where each state is shaded according to its closing percentage. The highest percentages are visible in the western and southern states.

AVG Days to Close by Month

The chart shows the average number of days required to close deals, which generally increased from May to August before decreasing towards January.

Month	AVG Days to Close
May	116
Jun	117
Jul	117
Aug	121
Sep	114
Oct	112
Nov	109
Dec	102
Jan	96

Copilot Preview

Create a report with Copilot
Describe the report you want, in your own words, and Copilot will create it quickly.

Help me build a sales report summarizing our key metrics and trends

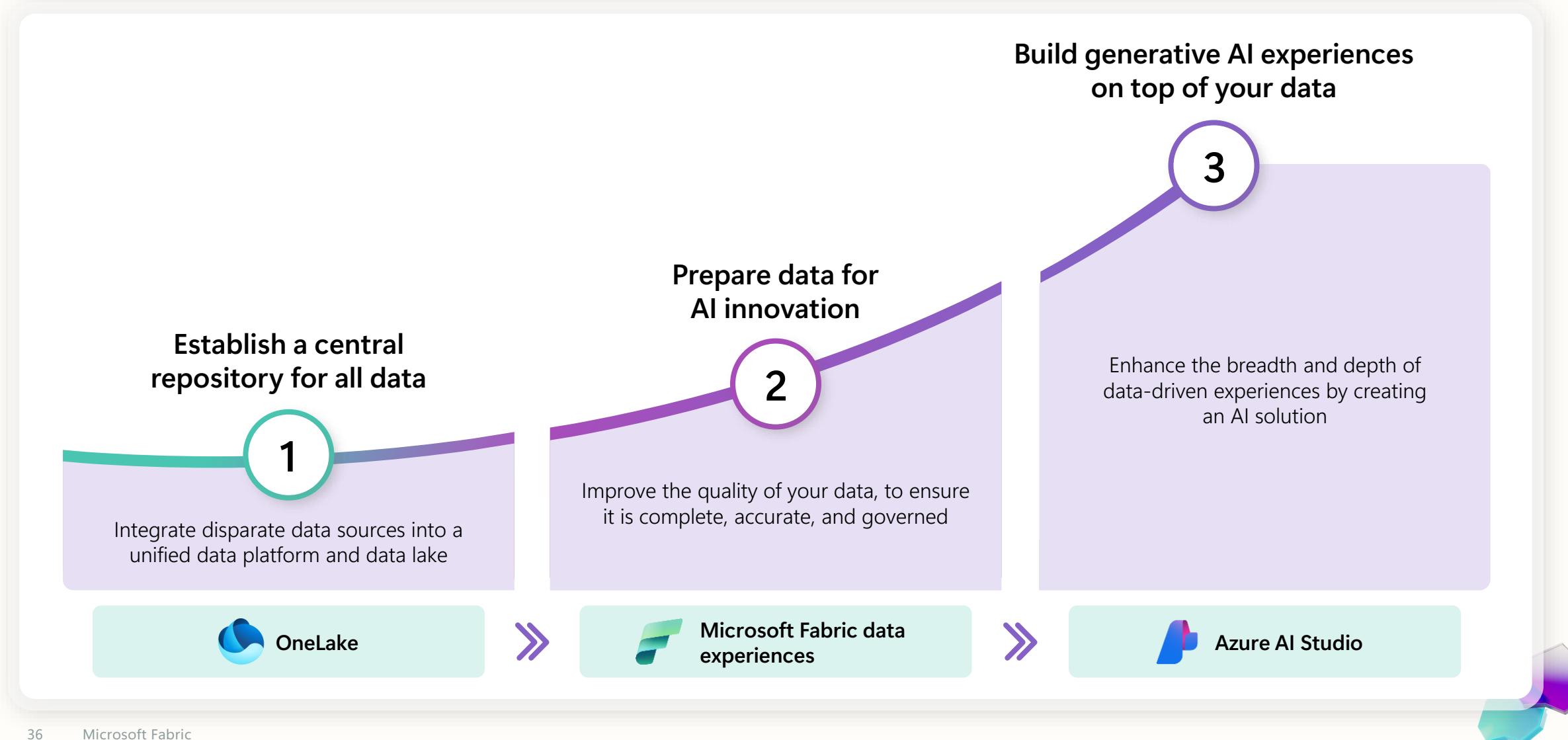
Sales overview page added

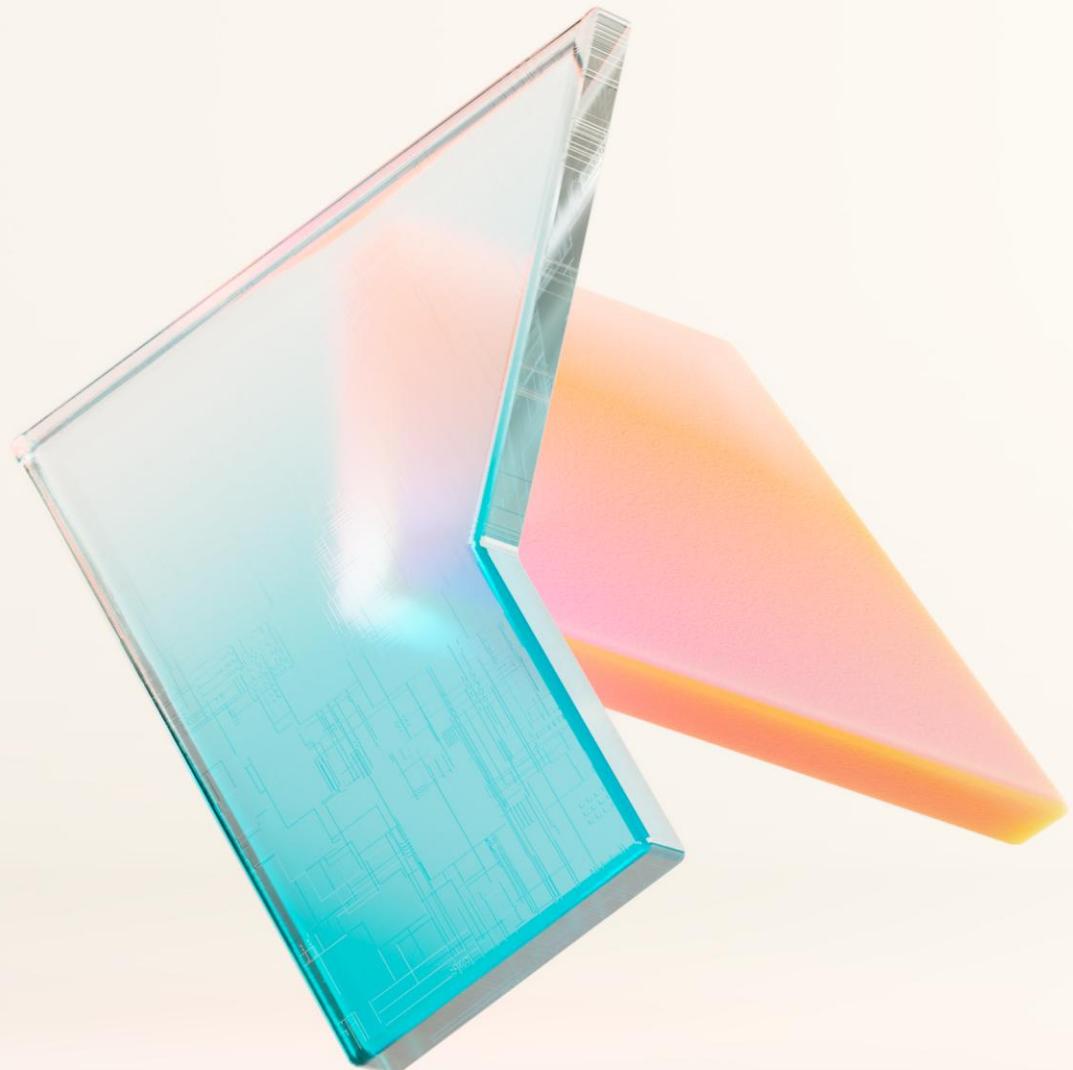
Ask a question or type / for suggestions

AI-generated content can have mistakes. Make sure it's accurate and appropriate before using it. [Read preview terms](#)

to finding insights and creating reports,

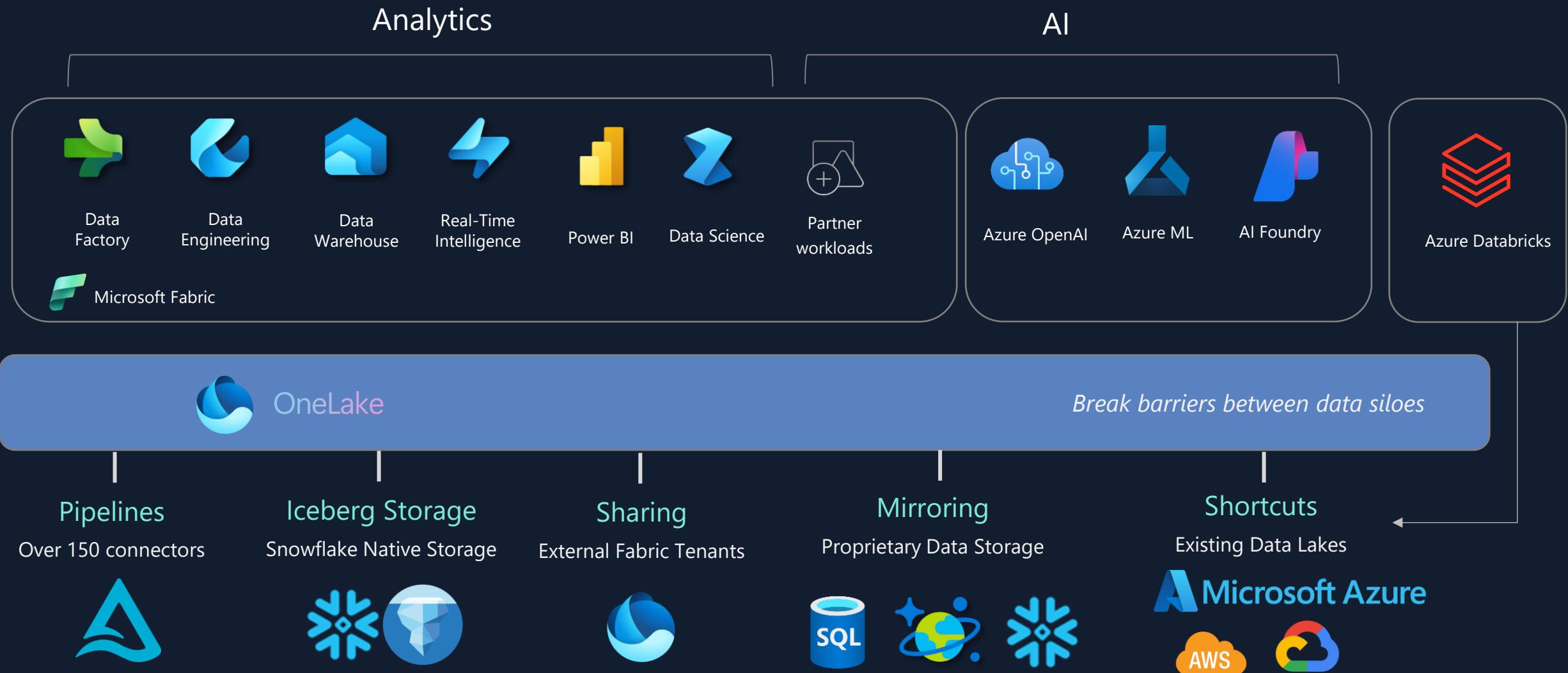
Fuel your journey to AI innovation by getting your data AI ready





Microsoft Fabric
integrates with
your existing stack

Easily Bring Data to Microsoft Fabric



Database Mirroring in Fabric

Automatically reflect data into OneLake

Snowflake

Mirroring for
Snowflake



Mirroring for
Azure SQL DB



Mirroring for
Cosmos DB



Mirroring for
Azure SQL MI



Mirrored Azure
Databricks Catalog



Mirroring for
Azure PostgreSQL

Coming soon



Mirroring for
SQL Server



Mirroring for SQL
Server 2025



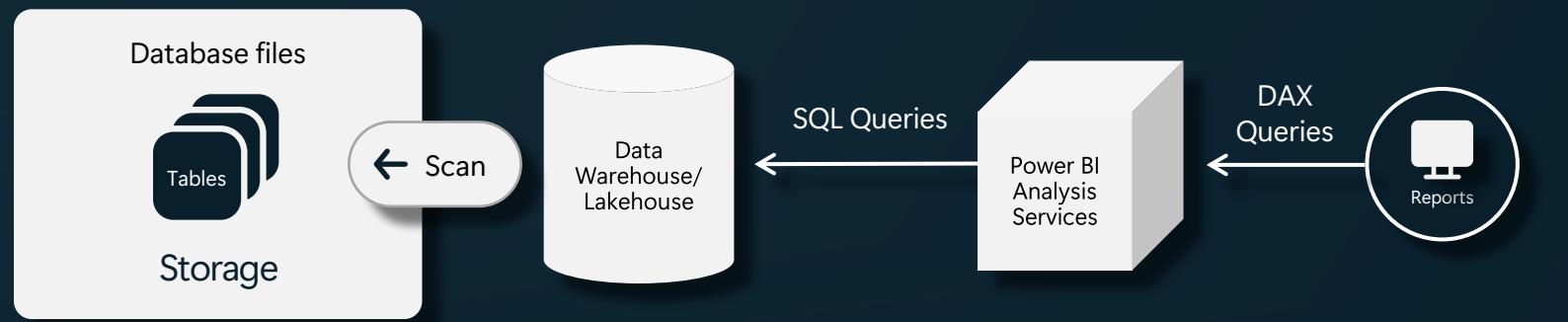
Mirroring for
Oracle



Mirroring for
Dataverse

Direct Query Mode

Slow, but real time



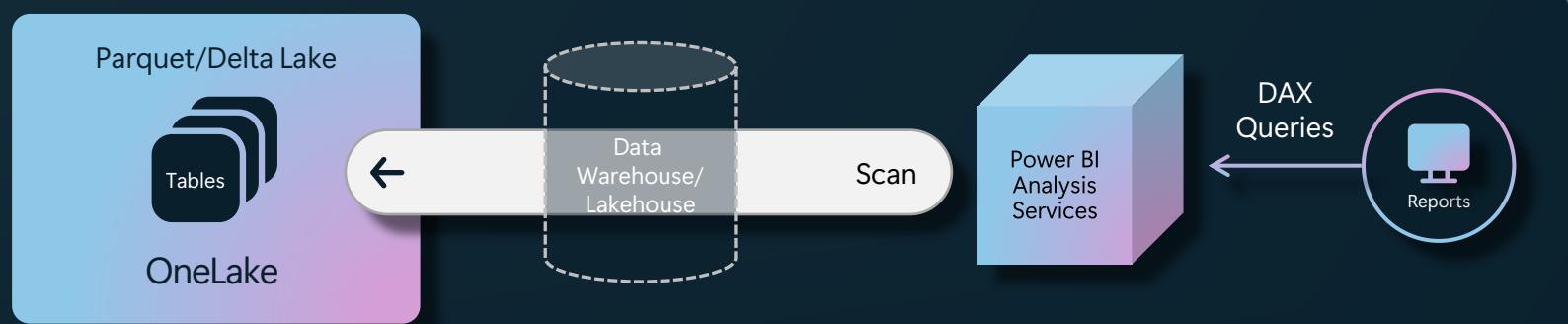
Import Mode

Fast, but duplicative



Direct Lake Mode

Fast, real time, no data duplication



And go further with specialized workloads built on Fabric



Adding their industrial cloud platform AVEVA Connect to access industry-specific capabilities



Adding their ArcGIS system to help you access industry-leading spatial analytics and reveal unexplored patterns



Adding its Cloud Data Management solution to help you find, understand, govern, and trust data



Adding their financial markets intelligence to help you access high-quality financial data and transform it for more value



Adding its Intelligent Decisioning engine on Fabric to help you automate decisions

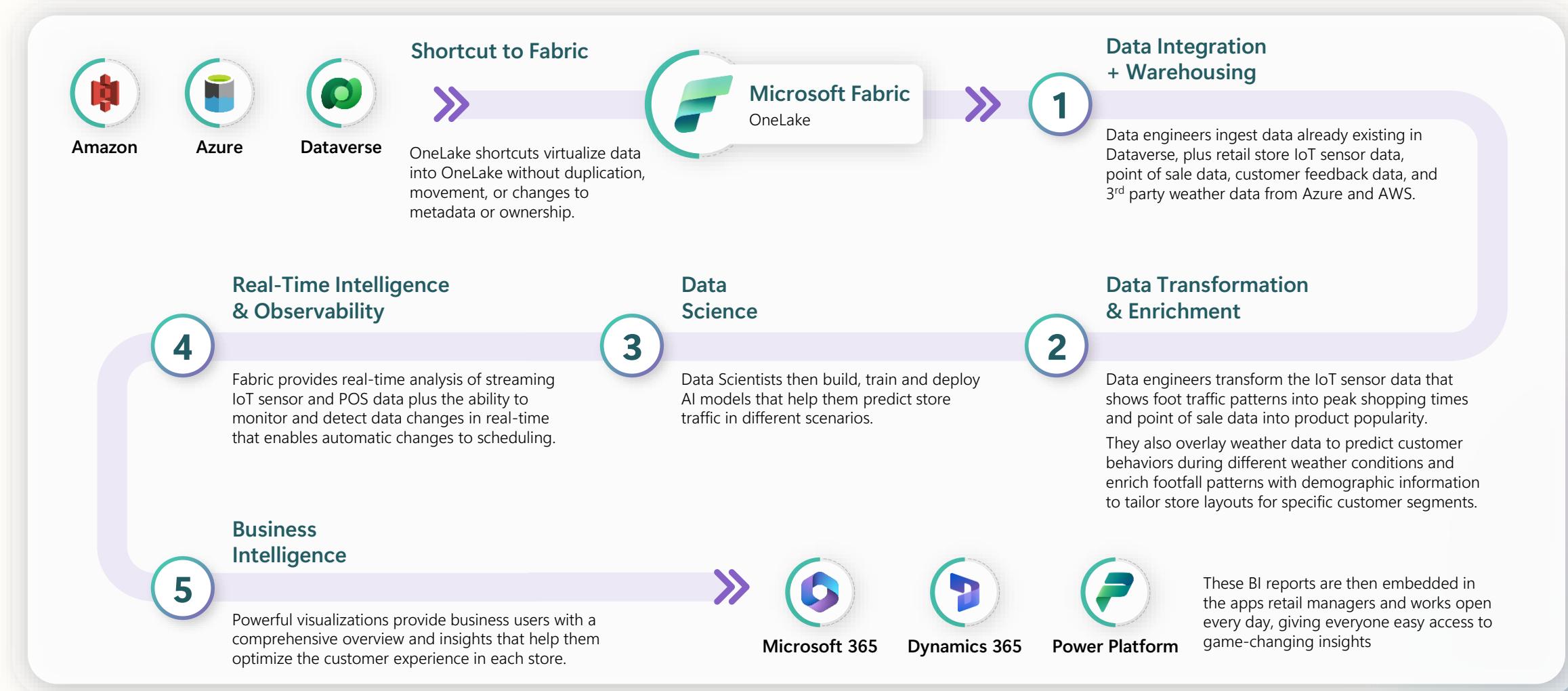


Adding its AI Unlimited serverless engine to help you go beyond SQL and extract more value from data

...

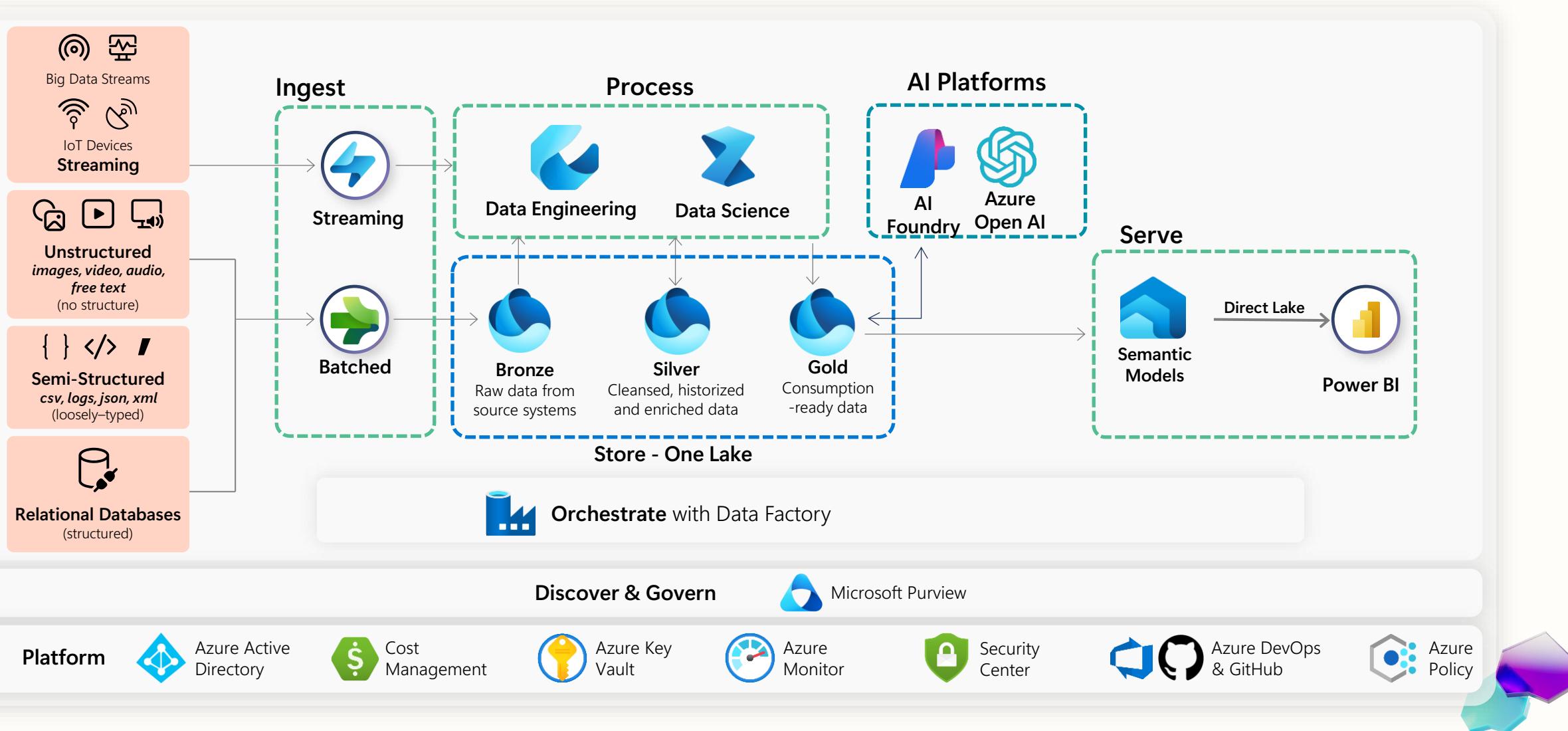
An illustrative retail example

Microsoft Fabric workloads in action





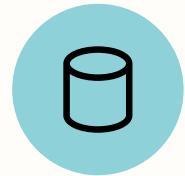
High Level Data, Analytics & AI Architecture



Get started today



Try Microsoft Fabric for 60 days free: [Link](#)



Set up a Microsoft Fabric proof of concept for your organization.



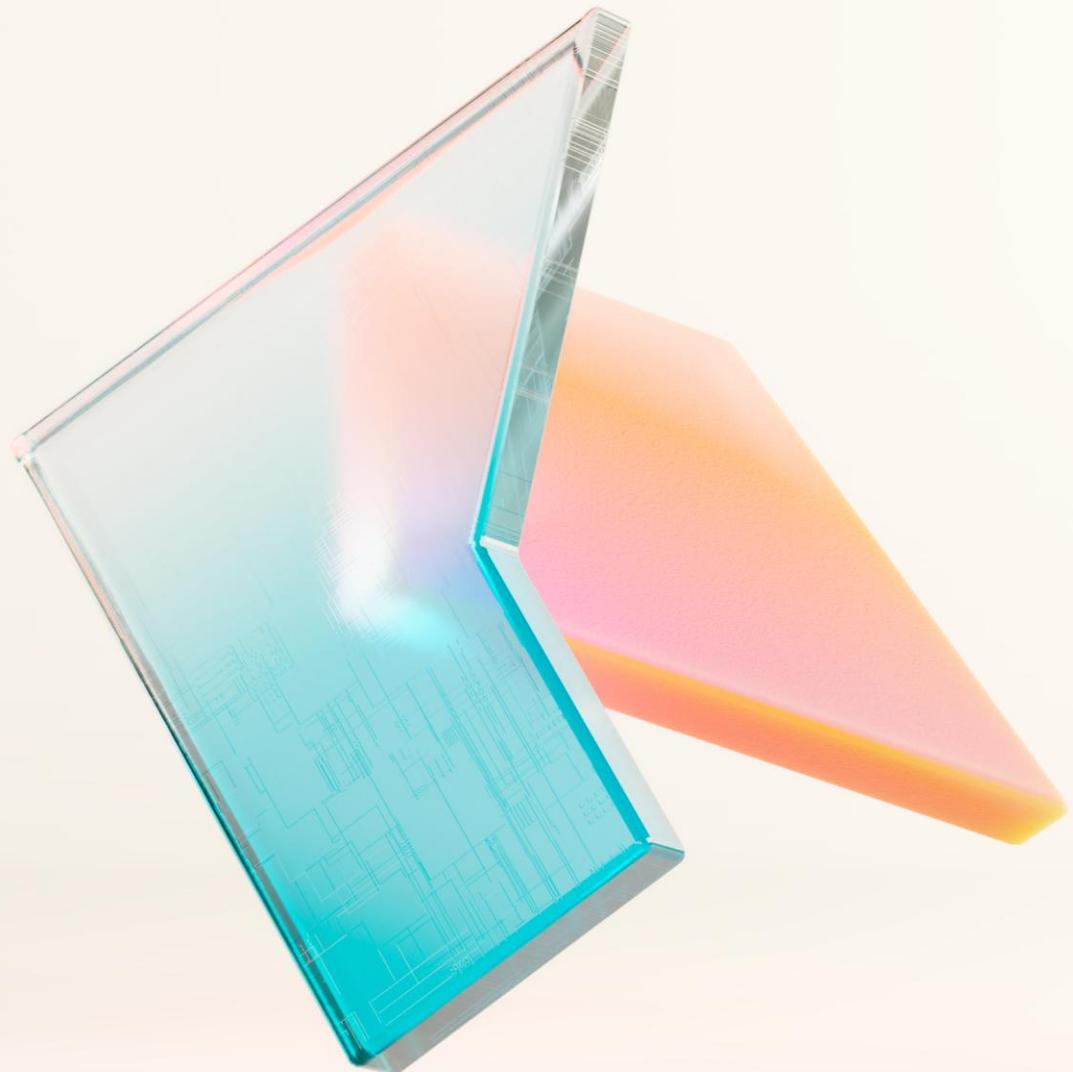
View the Fabric workloads in action and see how they can help you turn data into valuable insights: [Link](#)



Read the Projected Total Economic Impact of Microsoft Fabric: [Link](#)



Lets get started!



Hands on Lab

Customer scenario

Fabrikam, Inc. is a wholesale novelty goods distributor. As a wholesaler, Fabrikam's customers are mostly companies who resell to individuals. Fabrikam sells to retail customers across the United States including specialty stores, supermarkets, computing stores, and tourist attraction shops. Fabrikam also sells to other wholesalers via a network of agents who promote the products on Fabrikam's behalf. While all Fabrikam's customers are currently based in the United States, the company is intending to push for expansion into other countries/regions.

You are a Data Analyst in the Sales team. You collect, clean, and interpret data sets to solve business problems. You also put together visualizations like charts and graphs, write reports, and present them to the decision-makers in the organization.

To draw valuable insights from the data, you pull data from multiple systems, clean it, and mash it up together. You pull data from the following sources:

- **Sales Data:** This data comes from the ERP system and is stored in an ADLS Gen2 database or Databricks. It gets updated at noon / 12 PM every day.
- **Supplier Data:** This data comes from different suppliers and is stored in a Snowflake database. It gets updated at midnight / 12 AM every day.
- **Customer Data:** This data comes from Customer Insights and is stored in Dataverse. The data is always up to date.
- **Employee Data:** This data comes from the HR system; it is stored as an export file in a SharePoint folder. It gets updated every morning at 9 AM.

Customer scenario continued

You are currently building a semantic model on Power BI Premium that pulls the data from the above source systems order to satisfy your reporting needs as well as provide end users with the ability to self-serve. You use Power Query to update your semantic model.

You are facing the following challenges:

- You need to refresh your semantic model at least three times a day to accommodate the different update times for the different data sources.
- Your refreshes take a long time as you need to do a full refresh every time to capture any updates that happened to the source systems.
- Any errors in any of the data sources you are pulling from will result in your semantic model refresh breaking. A lot of times the employee file doesn't upload on time resulting in your semantic model refresh breaking.
- It takes a very long time to make any changes to your data model as Power Query takes a long time to refresh your previews, given the large data sizes and complex transformations.
- You need a Windows PC to use Power BI Desktop even though the corporate standard is Mac.
- You heard about Microsoft Fabric, and decided to try to see if it will address your challenges.

Lab 1

By the end of this lab, you will have learned:



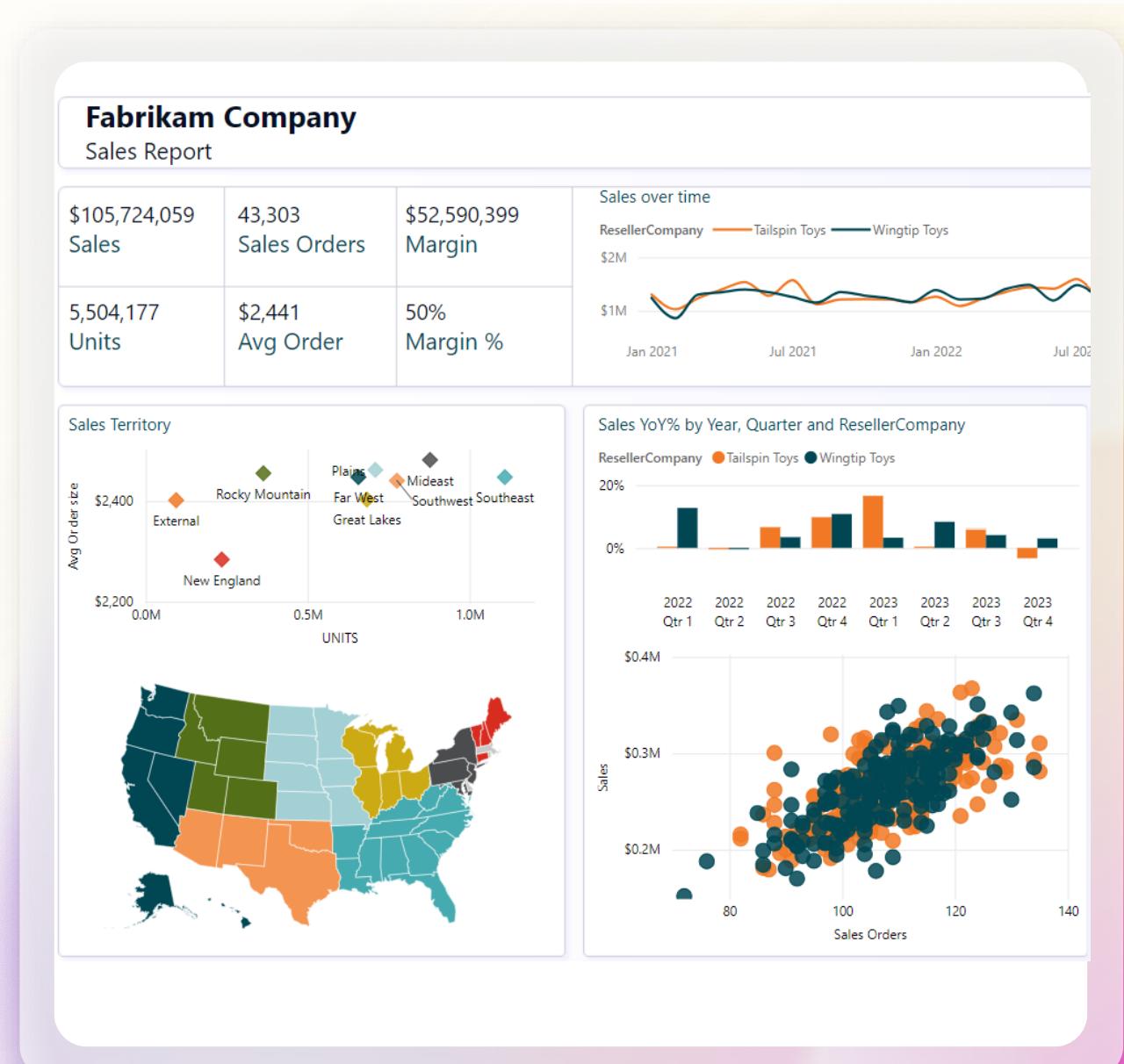
How to set up Power BI Desktop in lab environment



How to analyze Power BI Desktop Report



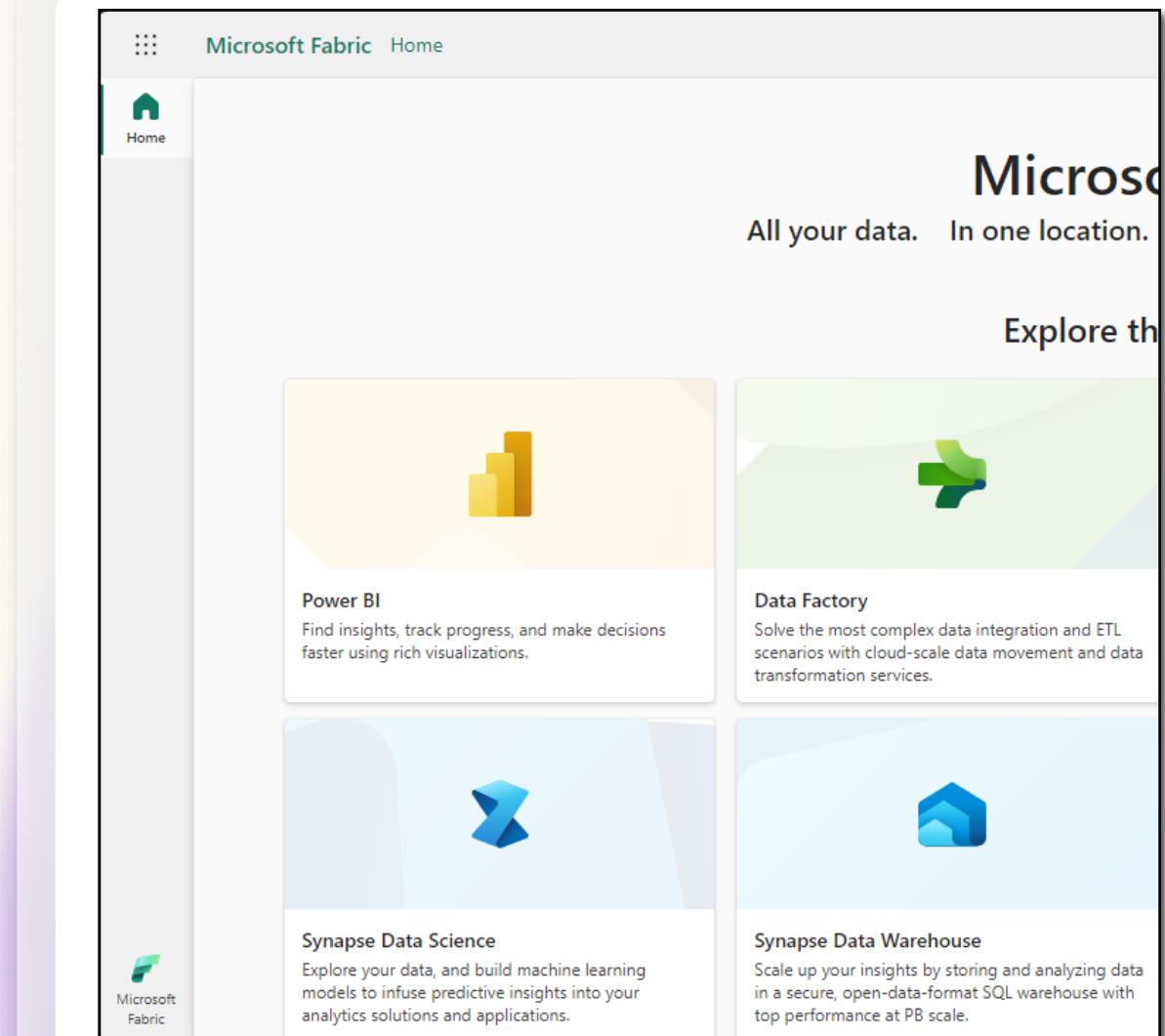
How to review Power Queries to understand the data sources



Lab 2

By the end of this lab, you will have learned:

- How to create a Fabric workspace
- How to create a Lakehouse



Lab 3

By the end of this lab, you will have learned:



How to create Shortcut to ADLS Gen2



How to connect to create Visual Queries



How to ingest data into Lakehouse

The screenshot shows the Microsoft Fabric Data Flow interface. On the left is a query editor displaying a table with three columns: Unit Price, Tax Rate, and Tax Amount. The data consists of 15 rows of values. To the right is a 'Query settings' pane. At the top is a 'Properties' section with a 'Name' field set to 'Sales' and an 'Entity type' dropdown set to 'Custom'. Below that is a 'Applied steps' section listing various data transformation steps: Source, Expanded Invoice, Removed Other Columns, Renamed Columns, Merged Queries, Added Custom, Changed Type, Removed Columns, and Renamed Columns1. The 'Renamed Columns1' step is currently selected. At the bottom of the pane is a 'Data destination' section with a 'Lakehouse' option. A large green 'Publish' button is highlighted with a red border at the bottom right of the pane.

LUNCH

45 minutes

11:30-12:30 PM

Lab 4

By the end of this lab, you will have learned:

- How to connect to SharePoint using Dataflow Gen2 and ingest data into Lakehouse
- How to connect to Snowflake using Dataflow Gen2 and ingest data into Lakehouse
- How to connect to Dataverse data by creating a Shortcut to existing Lakehouse

Dataflow 1

* Required

Name

Description

Last edited on 10/26/2023 at 11:35:42 AM by ODL_User 1111422

Save Cancel

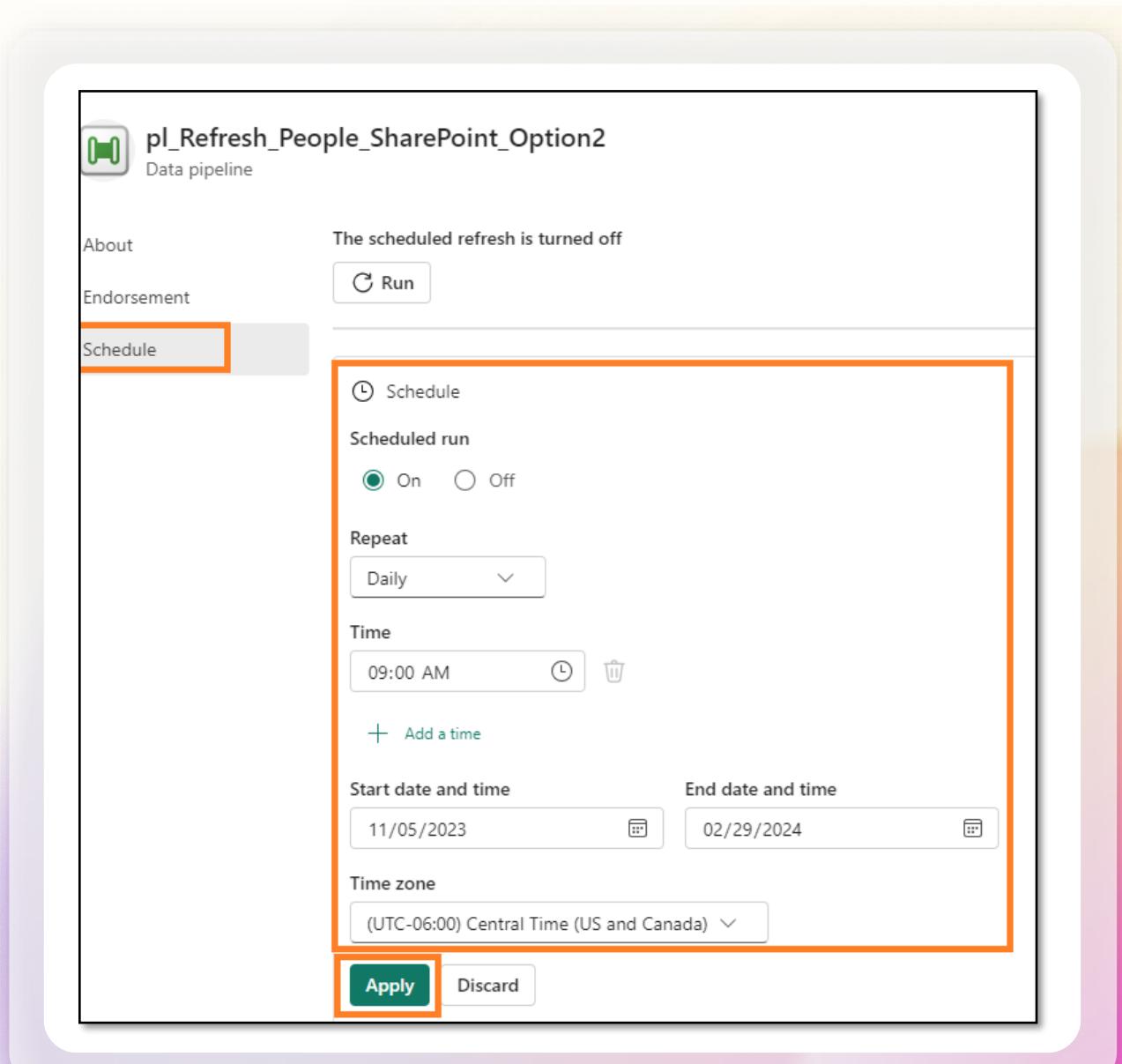
Lab 5

By the end of this lab, you will have learned:

→ How to configure a scheduled refresh of Dataflow Gen2

→ How to create a Data Pipeline

→ How to configure a scheduled refresh of a Data Pipeline

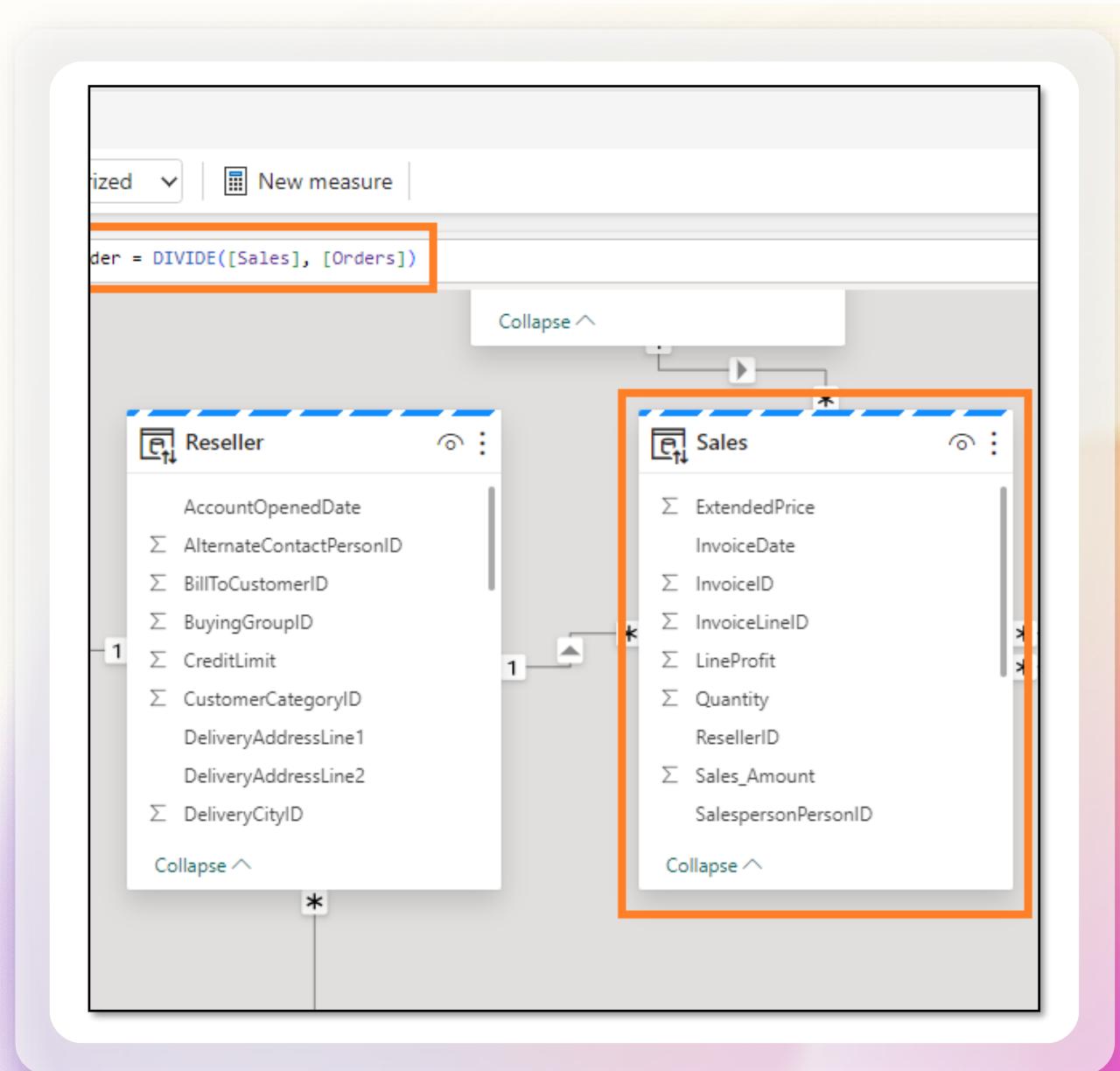


Lab 6

By the end of this lab, you will have learned:

→ How to create SQL view

→ How to create Semantic model



Lab 7

By the end of this lab, you will have learned:



How to auto-create a report



How to build a report starting from a blank canvas



How to connect Power BI Desktop to semantic model



How to experience Direct Lake mode resulting in data automatically refreshing

The screenshot shows a Microsoft Fabric workspace interface. At the top, there's a navigation bar with 'File', 'View', 'Reading view', 'Mobile layout', and 'Open data model'. Below it, the title 'Fabrikam Company' and 'Sales Report' are displayed. On the left, there are two summary cards: one for 'Sales' (\$108,732,646) and one for 'Units' (5,667,611). To the right of these cards is a chart titled 'Sale over Time' showing sales trends from May to October 2020. Below the cards is a section titled 'Workspace settings' containing links for 'About', 'Premium', 'Azure connections', 'System storage', 'Git integration', and 'Other'. A modal dialog box is open, asking 'Delete workspace?'. It contains a message: 'You're about to delete this workspace. Are you sure you want to continue?'. There are 'Delete' and 'Cancel' buttons at the bottom of the dialog.

EXPERT PANEL

15 minutes

3:40-3:55 PM

Survey

Unify your Data & Analytics Platform on Azure Workshop



