

# MICROSOFT FABRIC: CRASH COURSE

A Comprehensive Crash Course on Unified Data Analytics

# About Me

I'm a Computer Engineering graduate and a passionate data scientist. My journey has been fueled by a strong foundation in data analysis, visualization, and tools like Microsoft Fabric, which I utilize to derive impactful insights.

In my current role, I have:

- Collaborated on client projects to develop scalable ETL pipelines using Microsoft Fabric.
- Delivered data-driven solutions for various clients through Power BI.
- Authored articles on Power BI and Microsoft Fabric to share insights and practical applications.

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Data Science Trainee  
Data Science Dojo

# Agenda

- Introduction to Microsoft Fabric
- Discuss Key Components of Microsoft Fabric
- How Microsoft Fabric is different?
- Hands-On Tutorial with Microsoft Fabric
- Q&A and Resource Sharing

# What is Microsoft Fabric?

Microsoft Fabric is an end-to-end analytics and data platform designed for enterprises that require a unified solution. It encompasses data movement, processing, ingestion, transformation, real-time event routing, and report building.

With Fabric, you don't need to assemble different services from multiple vendors. Instead, it offers a seamlessly integrated, user-friendly platform that simplifies your analytics requirements.

# Components of Microsoft Fabric





# Example Workflow

Through an example workflow, let's compare how Microsoft Fabric differentiates itself from other Azure tools for this scenario.

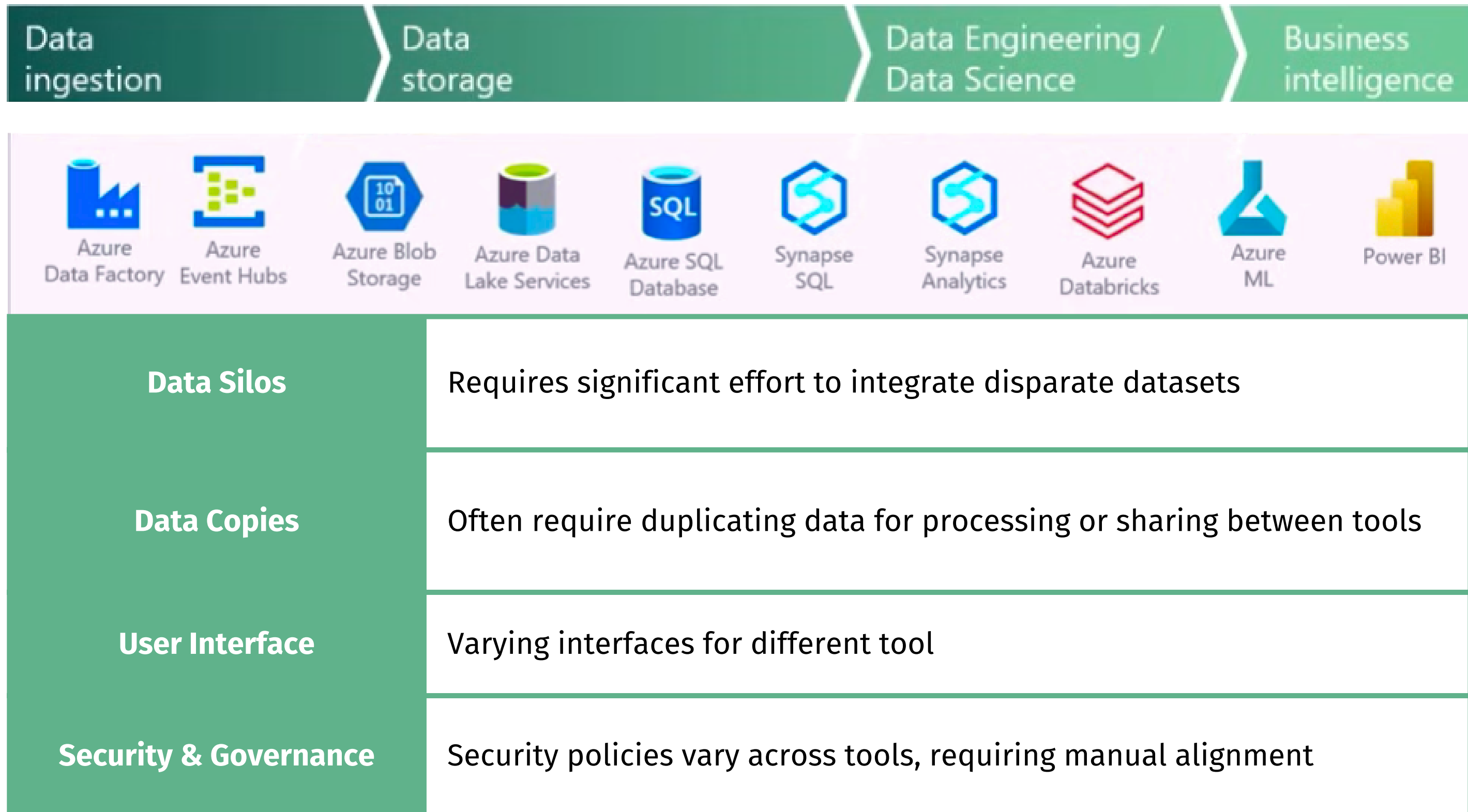
Data  
ingestion

Data  
storage

Data  
Engineering / Data Science

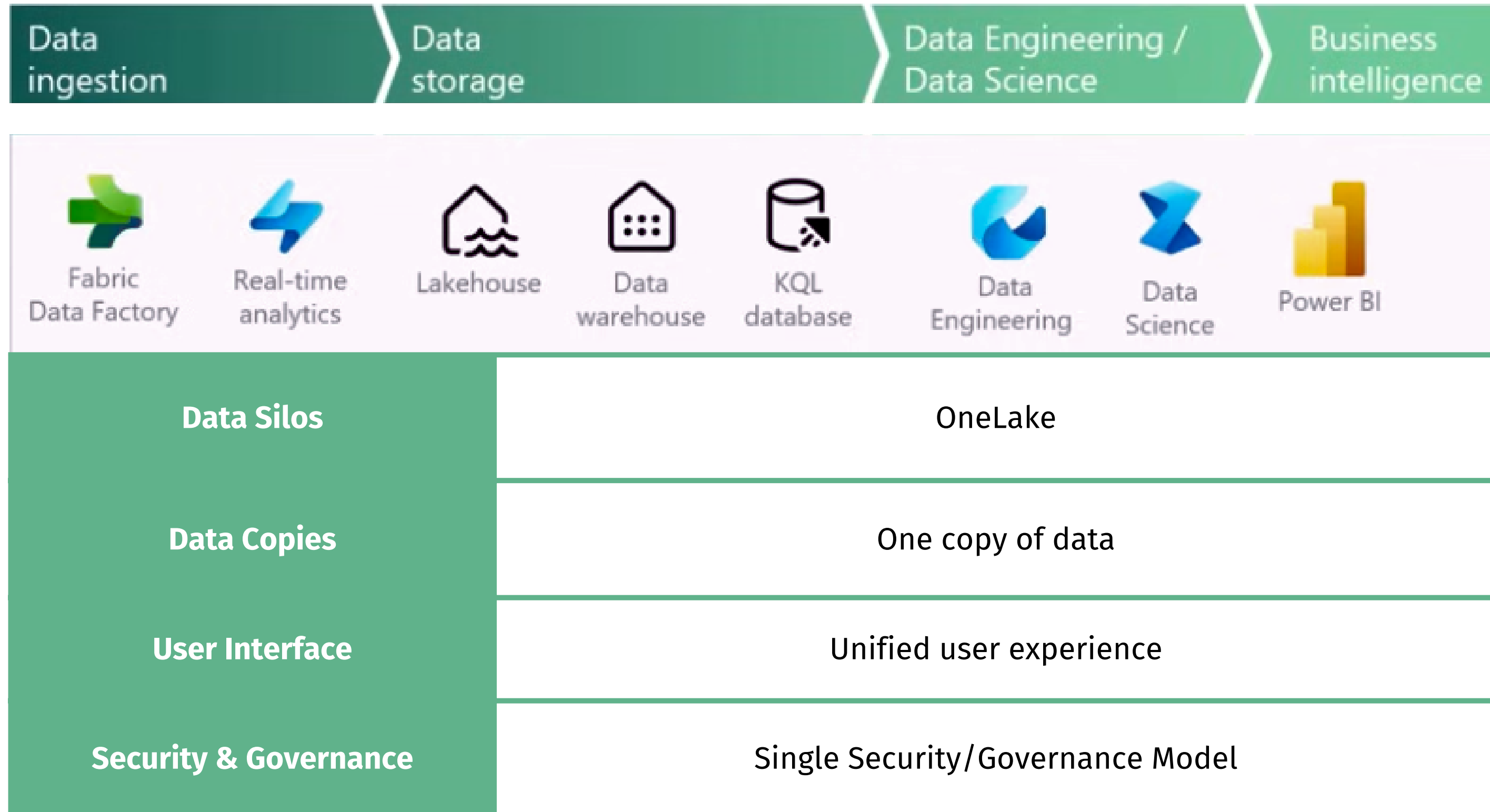
Business  
intelligence

# Existing Tools





# How Microsoft Fabric is different?



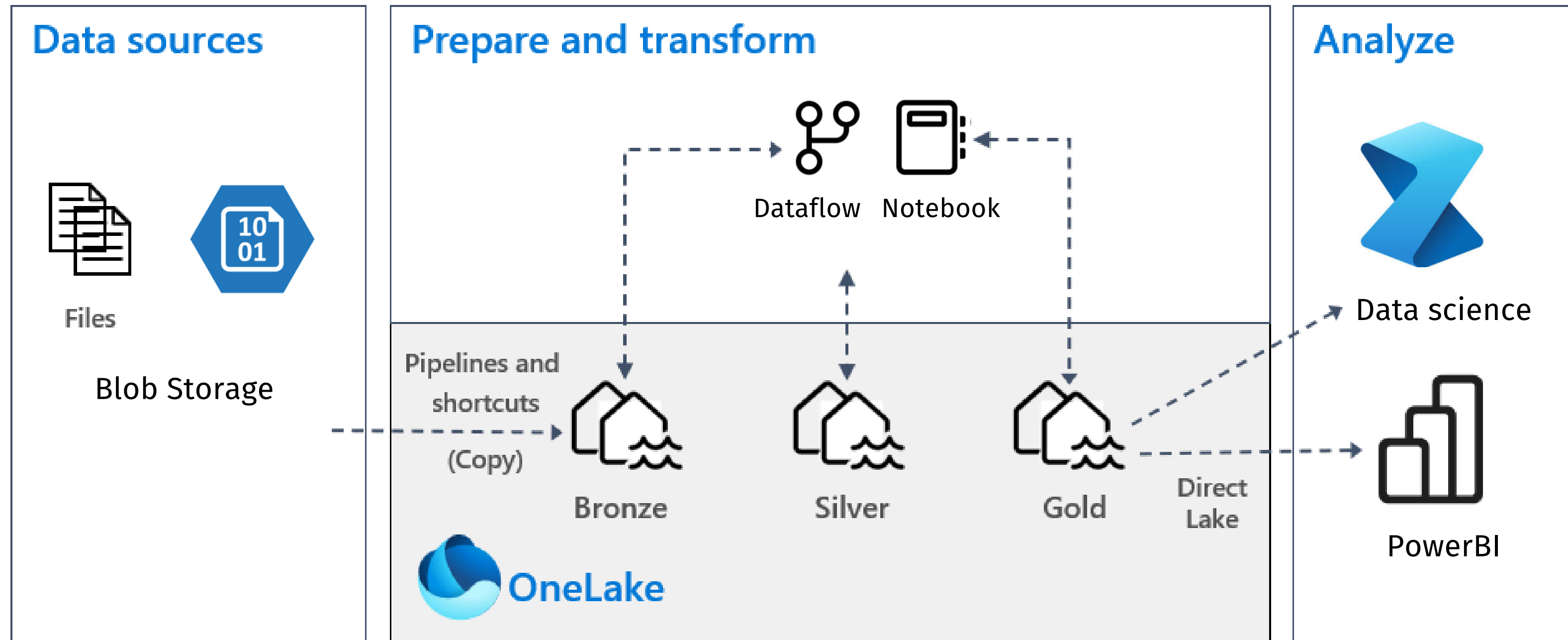
# Hands-on Exercise

In this exercise, we will predict whether bank customers will churn. This tutorial requires Data ingestion, Data Cleaning, Data Visualization, and Machine learning models.

Here is the flow of exercise:

- Copy data from Blob Storage to the Lakehouse
- Perform transformations on data using DataflowGen2 and store the transformed data in the Lakehouse
- Create a Notebook to further transform data and store it the Lakehouse.
- Utilize the transformed data to create a PowerBI business analytics report.
- Using the same transformed data, perform further required steps to create a predictive ML model.

# Architecture



# Live Demonstration



# Q & A Session

# Thank you!