



# Data warehouse implementation & BI reporting on Microsoft fabric

Pharmaceutical group purchasing organization (GPO)

Built a centralized Data Warehouse leveraging Microsoft Fabric and Medallion Architecture and developed comprehensive BI Reporting suite

# Pharmaceutical group purchasing organization (GPO) company needs data warehouse implementation & BI reporting on Microsoft fabric

## Picture this...

You're looking for setting up a Microsoft Fabric-based enterprise data warehouse & BI reporting solution to enable data-driven decision-making.

## You turn to Accordion.

We partner with your team to build a centralized Data Warehouse leveraging Microsoft Fabric and Medallion Architecture and developed comprehensive BI Reporting suite, including:

- 1) Assessing the data systems and set up a workspace under Microsoft Fabric capacity F64 based on the data size and computation requirements
- 2) Building pipelines to ingest data from multiple source systems – Adaptive Planning, Existing SQL Server on Azure VM, and SharePoint using APIs and data flows to create a single central repository of the data, the Bronze layer within Microsoft Fabric, with OneLake serving as the data storage solution
- 3) Cleaning the raw data from Bronze layer into the Silver layer and further transformed the cleaned data into a reporting-ready Gold layer in the Microsoft Fabric data warehouse, using Fabric Data flows, Pipelines and Notebooks
- 4) Developing automated Power BI dashboards on top of the reporting tables in Gold layer in the Fabric data warehouse to track critical KPIs across different functions and deployed them to a Power BI app accessible to the end users

## Your value is enhanced.

You have the robust enterprise data warehouse and BI reporting suite on Microsoft Fabric provided enhanced visibility into the revenue drivers and business performance, leading to more informed data-driven decision-making. You have pre-built reporting marts in gold layer of data warehouse reduced the Power BI dashboard refresh time by ~80% (from Avg. ~10 mins to < 2 mins). You have also automated pipelines and data source integration enabled to reporting to refresh daily as opposed to the earlier monthly schedule and also helped save ~60 person-hours a month.

### KEY RESULT

- >99% forecast accuracy
- 50% accelerated forecast

### VALUE LEVERS PULLED

- DBT Analysis
- Consolidation of Portal reports
- Variance Analysis

# Fabric data warehouse implementation for healthcare GPO

## Situation

- Client was grappling to identify the factors (manufacturers, members, products) driving their revenue growth (administrative fees minus rebates) and could not make strategic decisions due to a lack of automated reporting and dispersal of data across various systems.
- Partnered with the client to set up a Microsoft Fabric-based enterprise data warehouse & BI reporting solution to enable data-driven decision-making

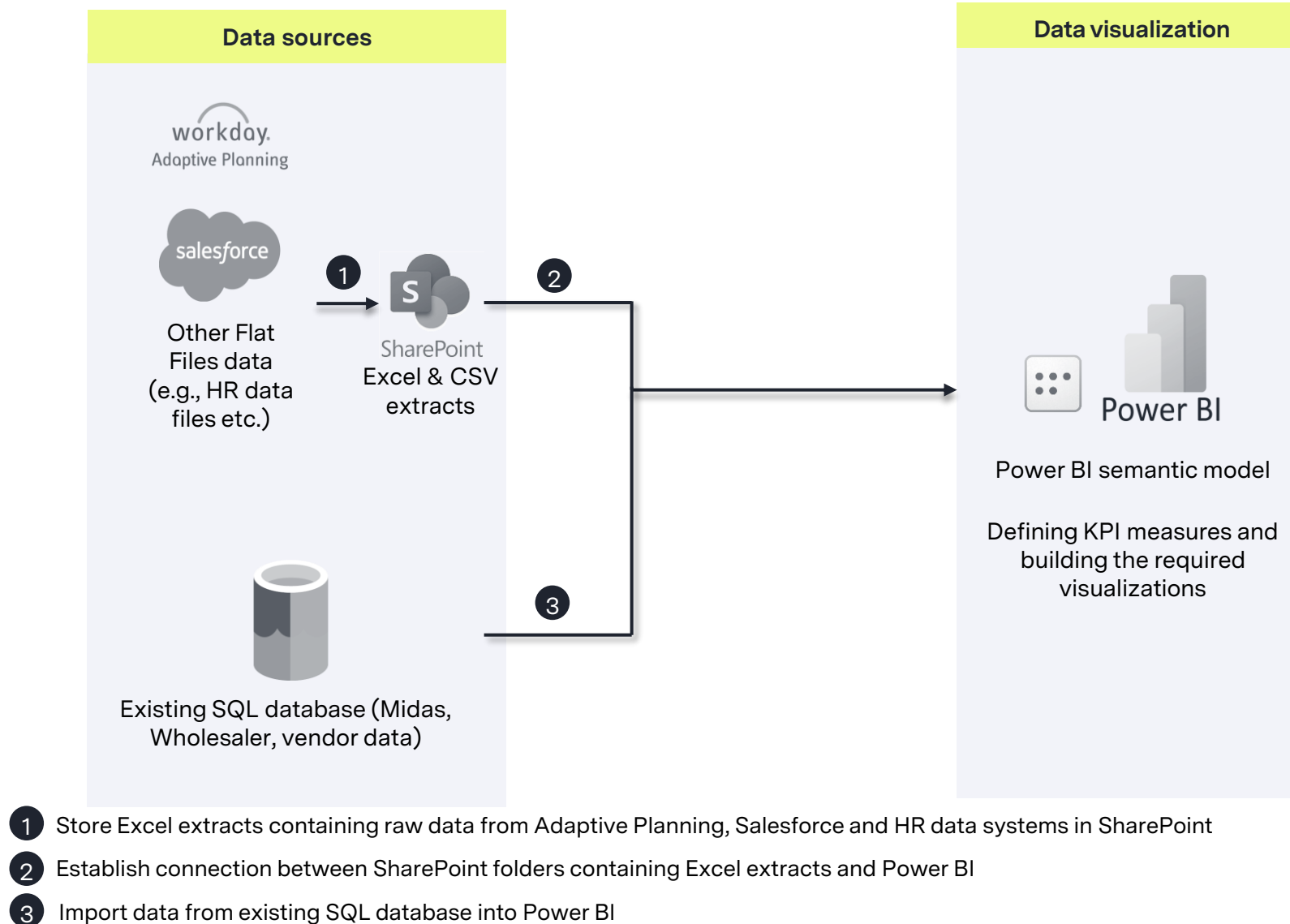
## Accordion Value Add

- Assessed the data systems and set up a workspace under Microsoft Fabric capacity F64 based on the data size and computation requirements
- Built pipelines to ingest data from multiple source systems – Adaptive Planning, Existing SQL Server on Azure VM, and SharePoint using APIs and data flows to create a single central repository of the data, the Bronze layer within Microsoft Fabric, with OneLake serving as the data storage solution
- Cleaned the raw data from Bronze layer into the Silver layer and further transformed the cleaned data into a reporting-ready Gold layer in the Microsoft Fabric data warehouse, using Fabric Data flows, Pipelines and Notebooks
- Developed automated Power BI dashboards on top of the reporting tables in Gold layer in the Fabric data warehouse to track critical KPIs across different functions and deployed them to a Power BI app accessible to the end users

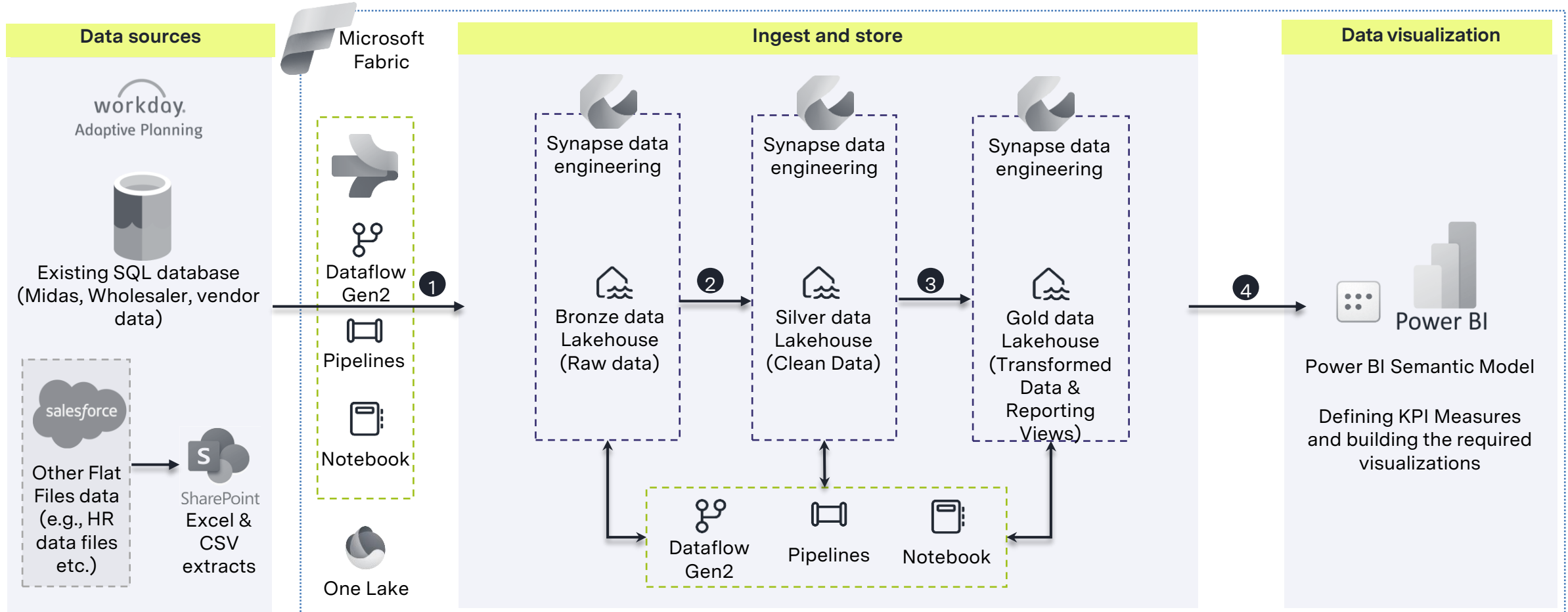
## Impact

- The robust enterprise data warehouse and BI reporting suite on Microsoft Fabric provided enhanced visibility into the revenue drivers and business performance, leading to more informed data-driven decision-making
- The pre-built reporting marts in gold layer of data warehouse reduced the Power BI dashboard refresh time by ~80% (from Avg. ~10 mins to < 2 mins)
- The automated pipelines and data source integration enabled to reporting to refresh daily as opposed to the earlier monthly schedule and also helped save ~60 person-hours a month

# BI architecture prior to Fabric implementation



# Current reporting flow after Fabric implementation



- 1 Ingest raw data from Adaptive (through API), Salesforce, HR data files, and existing SQL database into a Bronze Data Lakehouse using notebooks, pipelines, and data flows
- 2 The raw data from the Bronze layer is cleansed, standardized, and structured as tables into Silver Data Lakehouse
- 3 The cleansed data from the silver layer is refined to meet specific downstream business and analytics requirements into Gold Data Lakehouse in star schema
- 4 The transformed reporting data from Gold Data Lakehouse is imported to build Power BI semantic model for visualizations and all reporting requirements