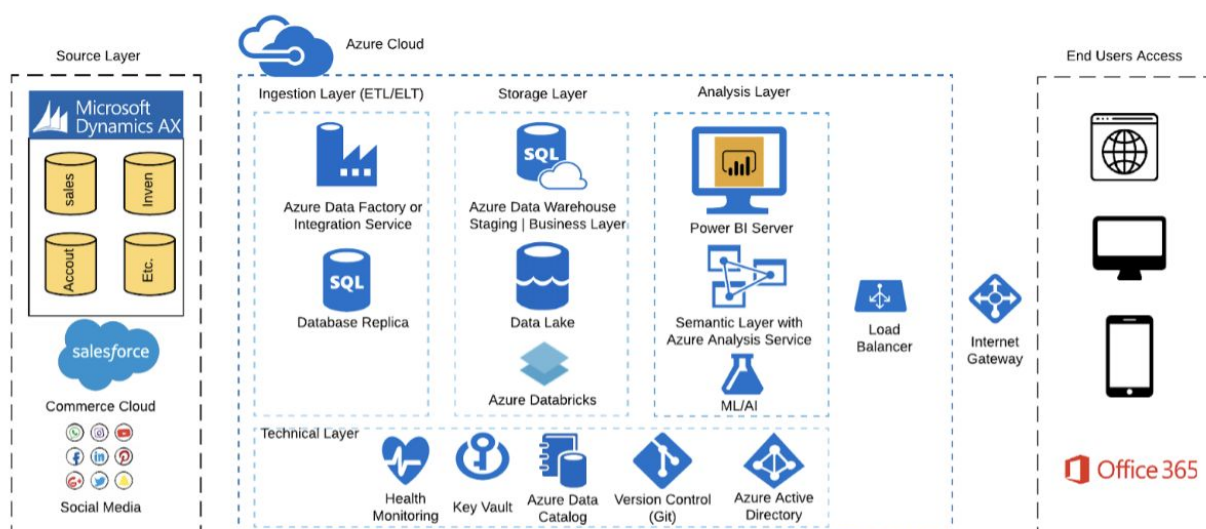


# Cloud Data Warehouse in a Day

In this course, you will learn concepts, strategies, and best practices for designing a cloud-based data warehousing solution using Microsoft Azure SQL Data Warehouse, the petabyte-scale data warehouse in Azure. We will demonstrate how to collect, store, and prepare data for the data warehouse by using other Azure services. We will also explore how to use business intelligence (BI) and ETL tools to perform analysis on your data and integration.

There is the reference architecture diagram with Azure DW:



## Course Objectives

- Meet Azure ecosystem
- Evaluate the relationship between Azure SQL Datawarehouse and other Big Data systems
- Evaluate use cases for data warehousing workloads and review the real-world implementation of Azure data and analytic services as part of a data warehousing solution
- Choose an appropriate Azure SQL Data Warehouse node type and size for your data needs
- Understand which security features are appropriate for Azure SQL Data Warehouse, such as encryption, permissions, and database permissions
- Launch an Azure SQL Data Warehouse cluster and use the components, features, and functionality to implement a data warehouse in the cloud

- Identify data sources and assess requirements that affect the data warehouse design
- Design the data warehouse to make effective use of compression, data distribution, and sort methods
- Integration data with Azure Data Factory
- Load and unload data and perform data maintenance tasks
- Write queries and evaluate query plans to optimize query performance
- Configure the database to allocate resources such as memory to query queues and define criteria to route certain types of queries to your configured query queues for improved processing
- Audit, monitor, and receive event notifications about activities in the data warehouse by using features and services at Microsoft Azure
- Prepare for operational tasks such as resizing Azure SQL Data Warehouse clusters and using snapshots to back up and restore clusters
- Use a BI application to perform data analysis and visualization tasks against your data

## Intended Audience

- Programm Data Managers
- BI/Data Engineering Managers
- Database architects/administrators
- Data analysts
- Data scientists
- Data Engineers
- BI engineers