

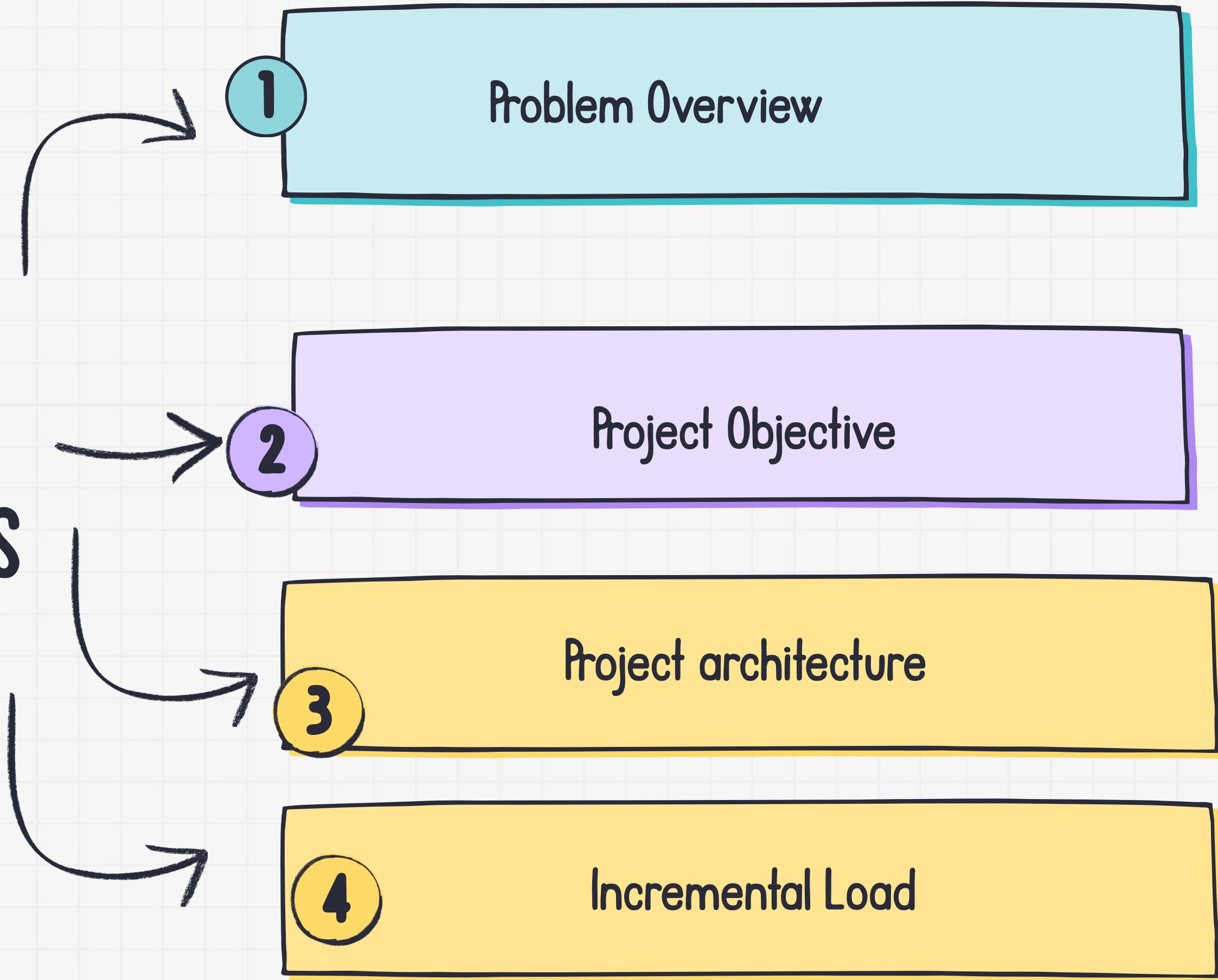
# DWH\_Project

*AdventureWork Company*

Presented by Choun Sambat



# AGENDAS



# PROBLEM OVERVIEW

- Adventure Works Cycles is a global manufacturing company that sells its products through a network of resellers and an online web portal.
- Currently, the company stores all operational data in a transactional database
- It was not designed for analytical or strategic purposes

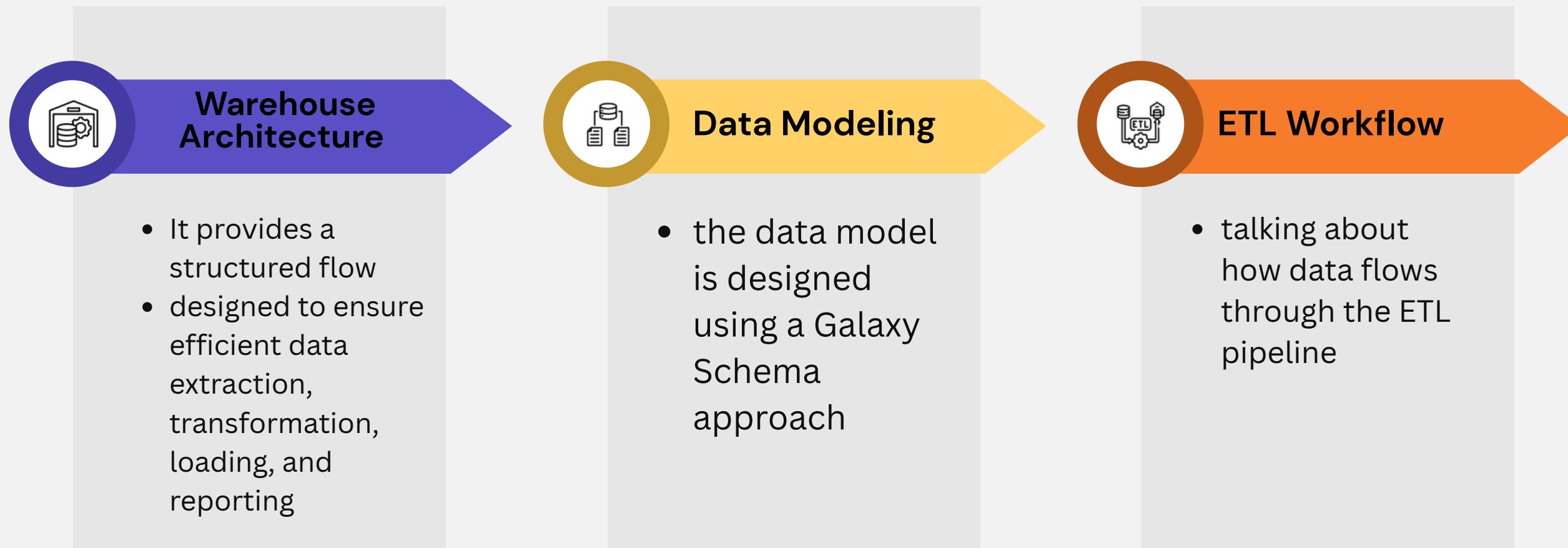


# PROJECT OBJECTIVE

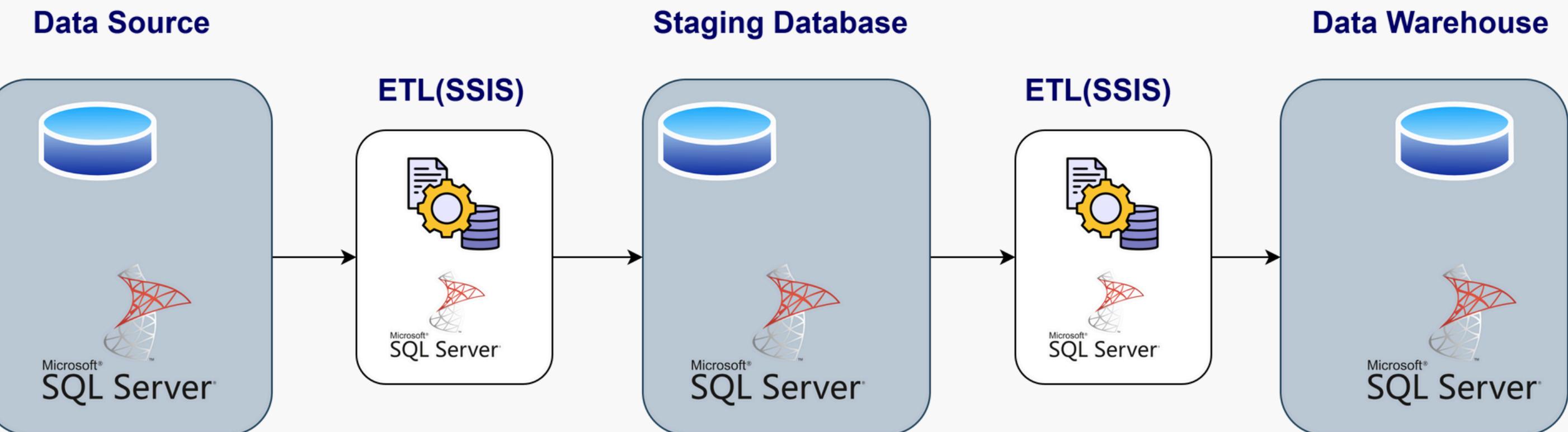
Design and implement a Sales Data Warehouse  
(AdventureWorks\_DWH) that enables fast, accurate,  
and insightful data analysis



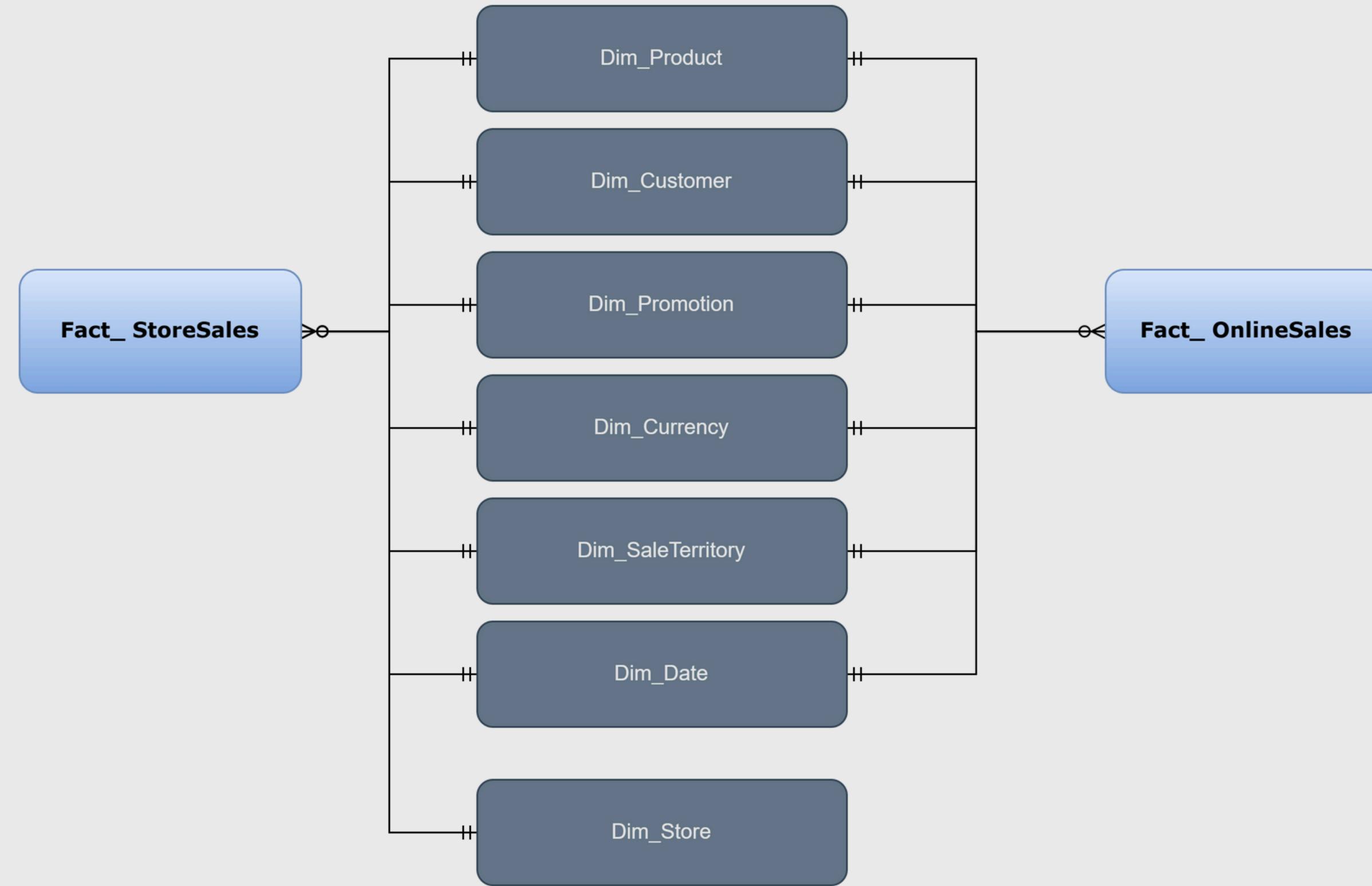
# PROJECT ARCHITECTURE



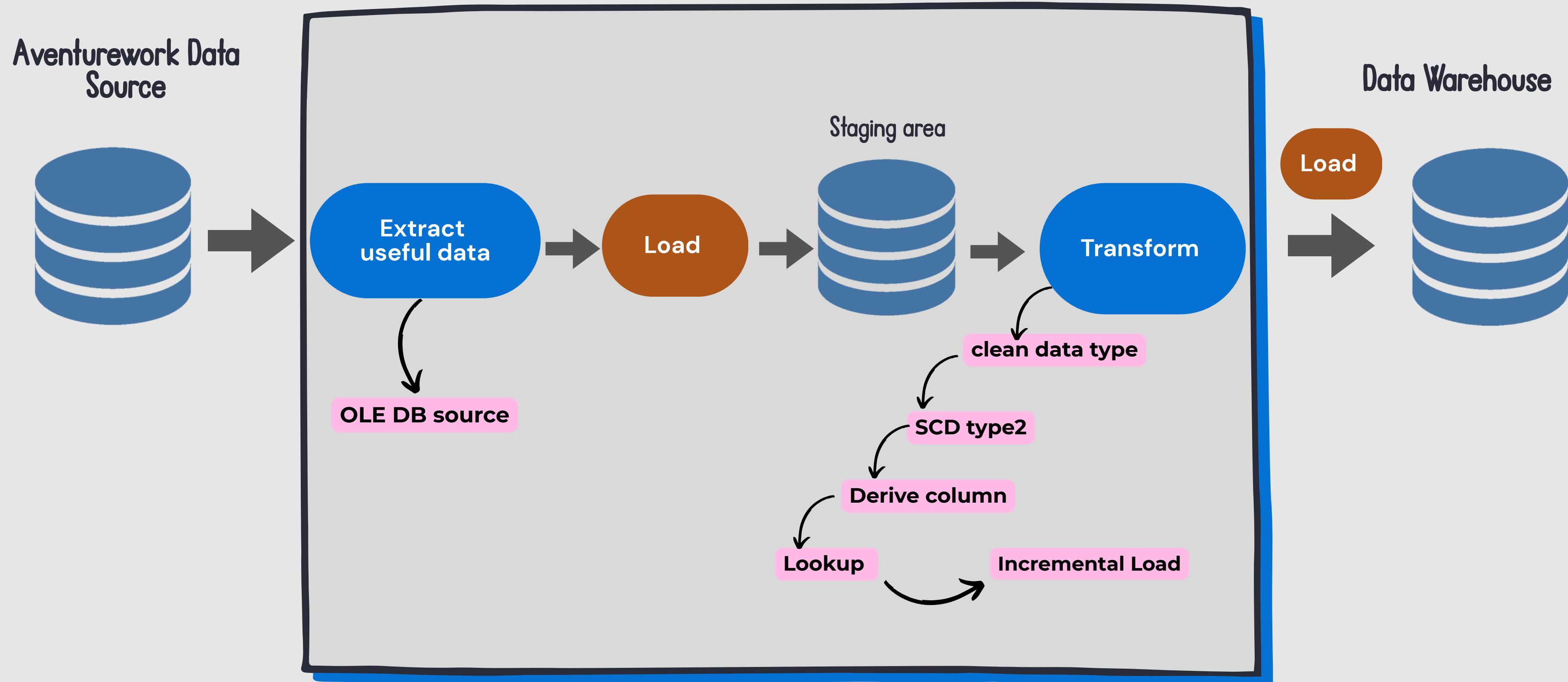
# Warehouse Architecture



# Data Modeling

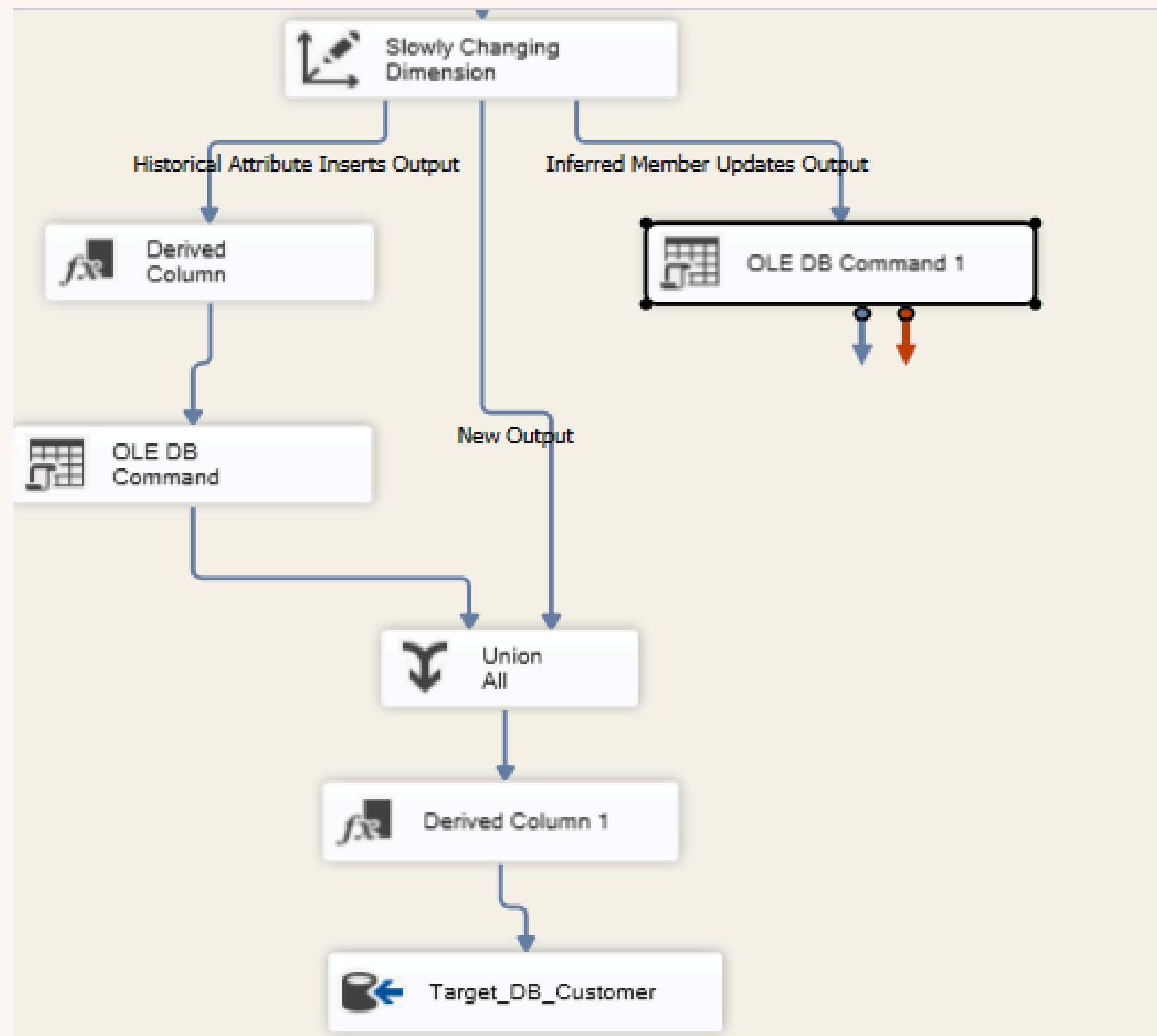


# ETL Workflow



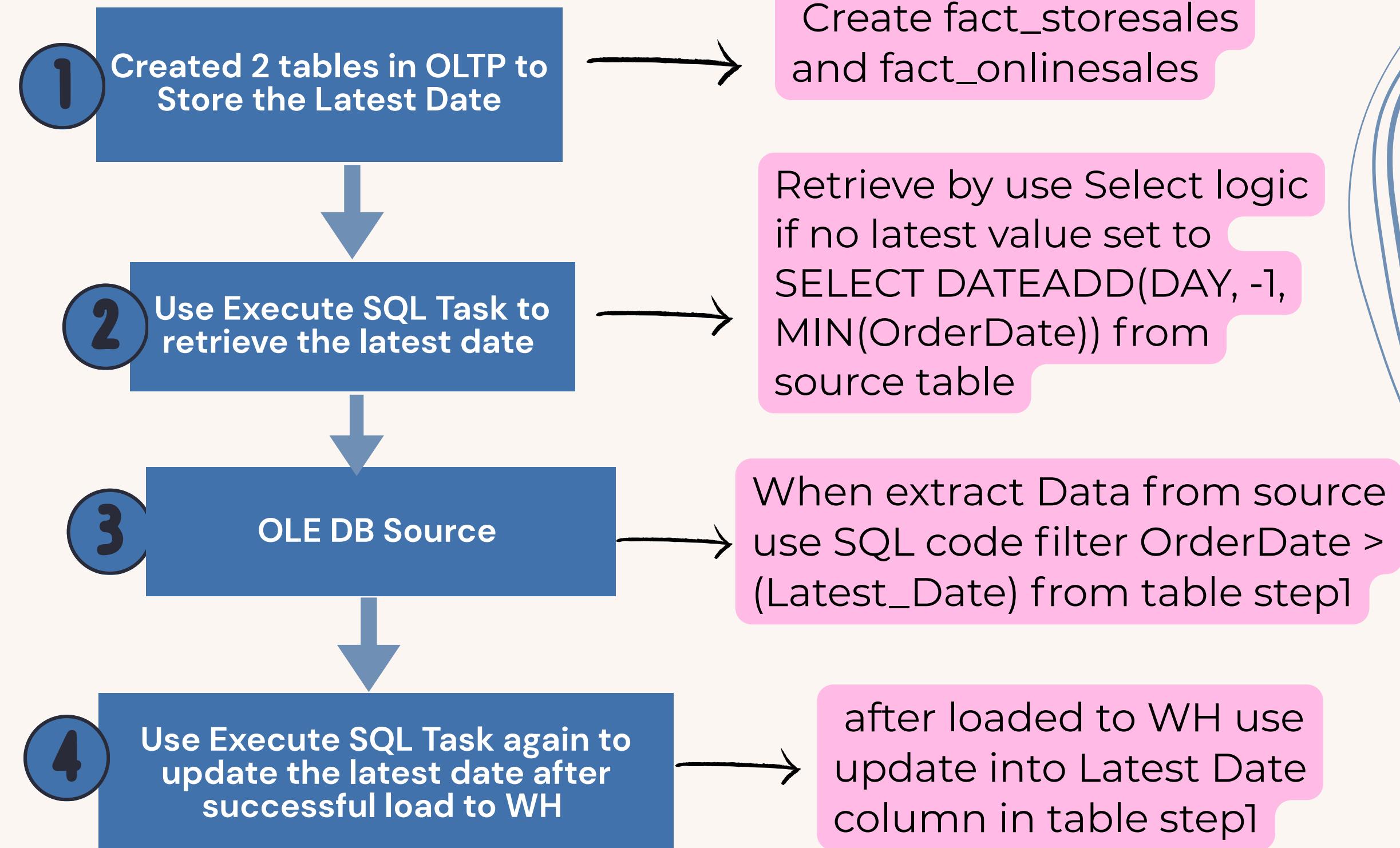
# Incremental Load

## Incremental Load for Dimension Tables (SCD type2)



# Incremental Load

## Incremental Load for Fact Tables



# Incremental Load

## Incremental Load Steps for Fact Tables in ETL pipeline



# Project Results

scheduling succeeded

The screenshot shows the SQL Server Management Studio interface. On the left, the 'Job History' node under 'select logs' is expanded, showing several entries for 'ETL\_AdventureWorks\_Project\_DailyLoad'. One entry for 'Morning ETL Load' on 11/11/2025 at 5:10:01 PM is selected, showing a successful execution. On the right, the 'Job Properties - ETL\_AdventureWorks\_Project\_DailyLoad' window is open, specifically showing the 'Schedules' page. It lists a single schedule named 'Morning ETL Load' with the description 'Occurs every day at 5:10:00 PM. Schedule will run until canceled.' A large hand-drawn arrow points from this window down towards the 'Data show in WH' section.

Data show in WH

The screenshot shows the SQL Server Management Studio interface. The Object Explorer on the left shows the connection to 'AdventureWorks\_DWH\_Sam'. In the center, a query window titled 'SQLQuery\_Tuncate... (USER\samba (67))' is running. The query selects data from three tables: FactOnlineSales, FactStoreSales, and DimCustomer. The results pane displays the retrieved data. The data includes columns like OrderDate, PurchaseOrderNumber, RevisionNumber, SalesOrderNumber, ShipDate, and various dimensions related to sales and customers.

Latest\_Date Was update

The screenshot shows the SQL Server Management Studio interface. The Object Explorer on the left shows the connection to 'AdventureWorks\_DWH\_Sam'. In the center, a query window titled 'SQLQuery\_Tuncate... (USER\samba (67))' is running. The query uses MAX(OrderDate) to find the latest update dates for Online and Store sales. The results pane shows the maximum dates for both categories. The data includes columns like OrderDate, PurchaseOrderNumber, RevisionNumber, SalesOrderNumber, and SalesPersonID.

# Thank you!

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