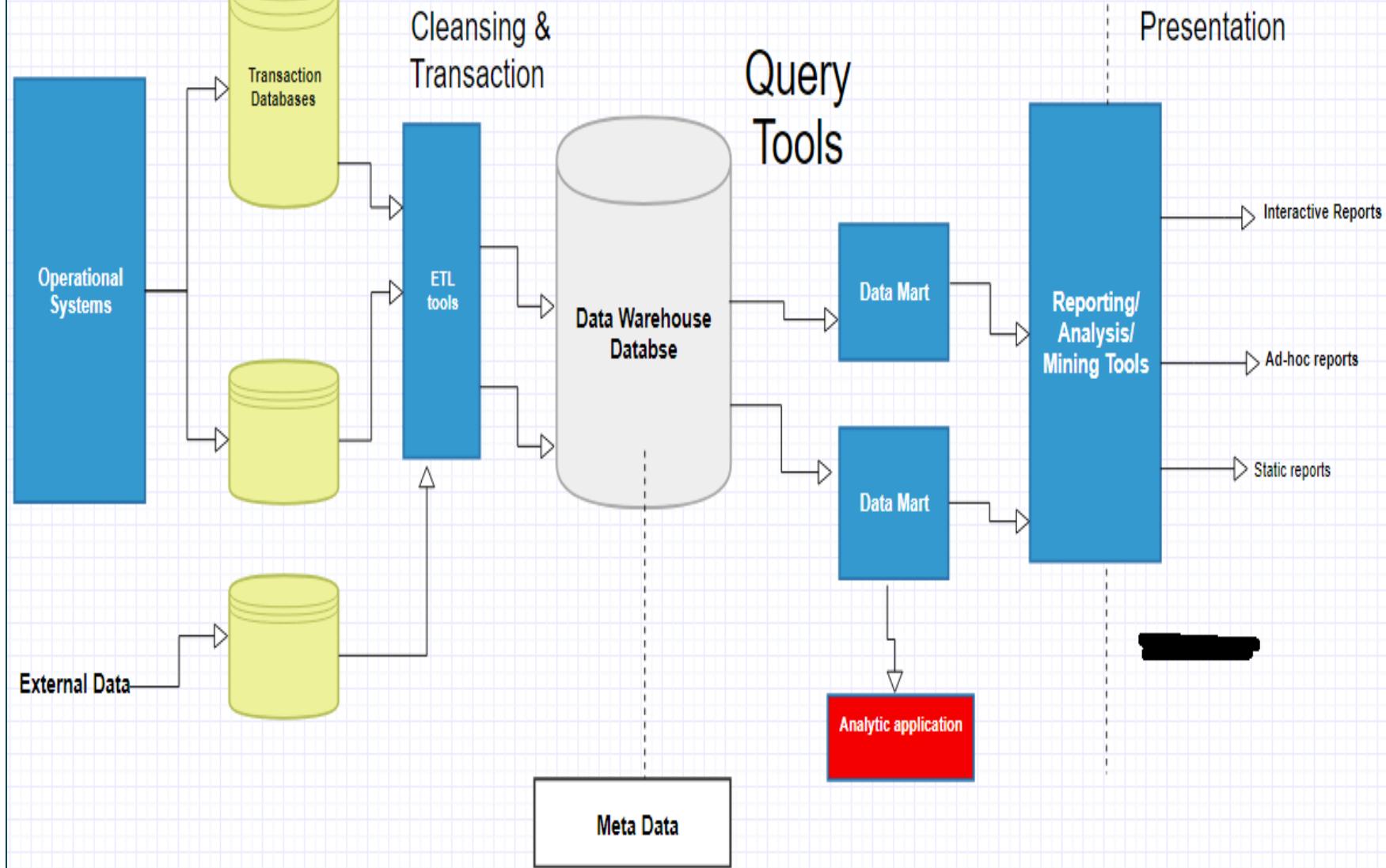


# Data Warehouse Architecture

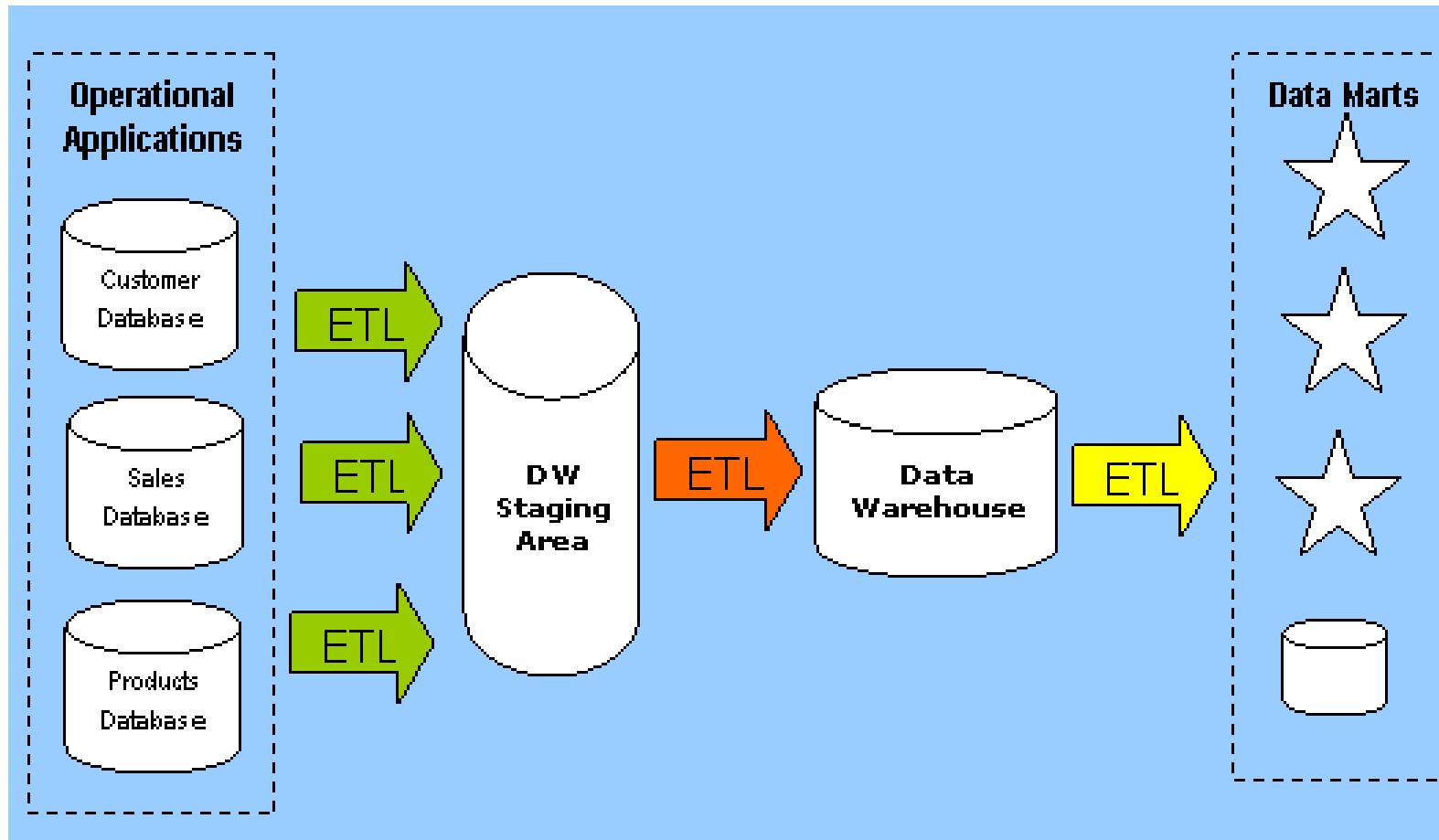
# Data Warehouse Architecture



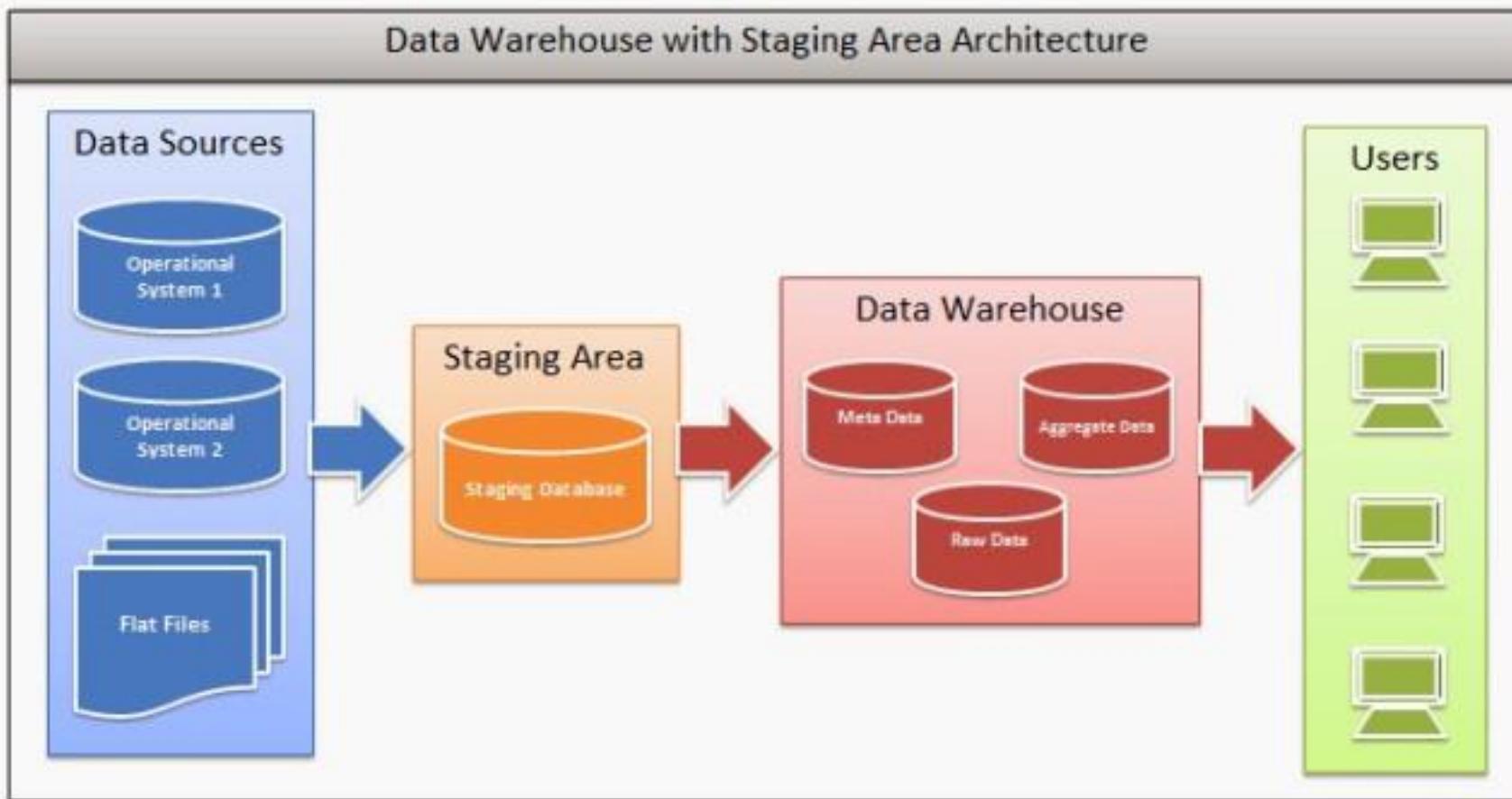
# Data Staging

- A data staging area (DSA) is a **temporary storage area** between the data sources and a data warehouse.
- When **incremental data** must be loaded in the Data Warehouse then staging tables are used
- After data has been loaded into the staging area, the staging area is used to combine data from multiple data sources, transformations, validations, data cleansing.

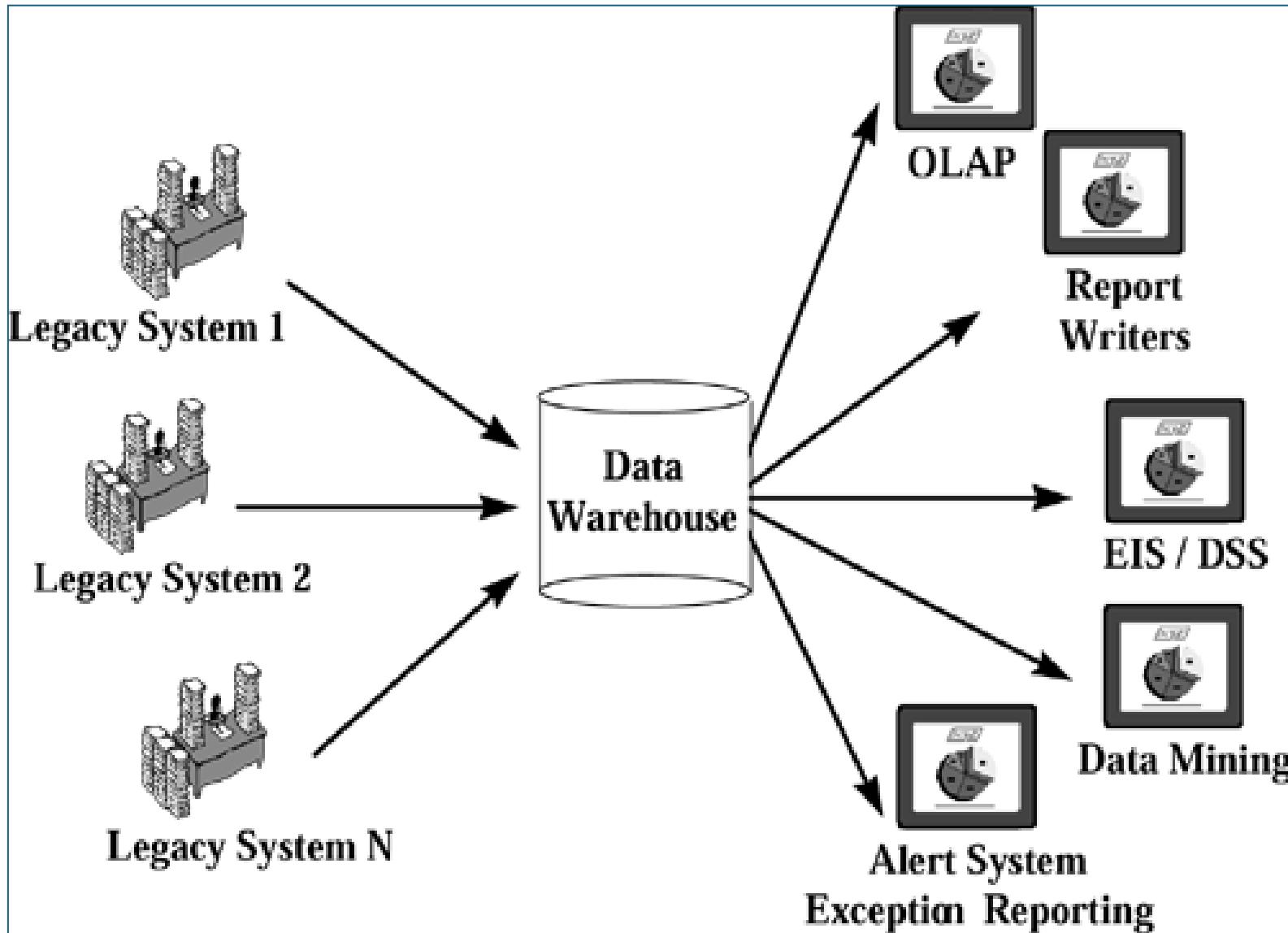
# Example 1 of Data Stage



# Example 2 of Data Stage



# Multiple Inputs and Multiple Outputs via D/W



# Volume of Data in a D/W

- Terabytes --  $10^{12}$  bytes: Wal-Mart -- 24 Terabytes
- Petabytes --  $10^{15}$  bytes: Geographic Information Systems
- Exabytes --  $10^{18}$  bytes: National Medical Records
- Zettabytes --  $10^{21}$  bytes: Weather images
- Zottabytes --  $10^{24}$  bytes: Intelligence Agency Videos