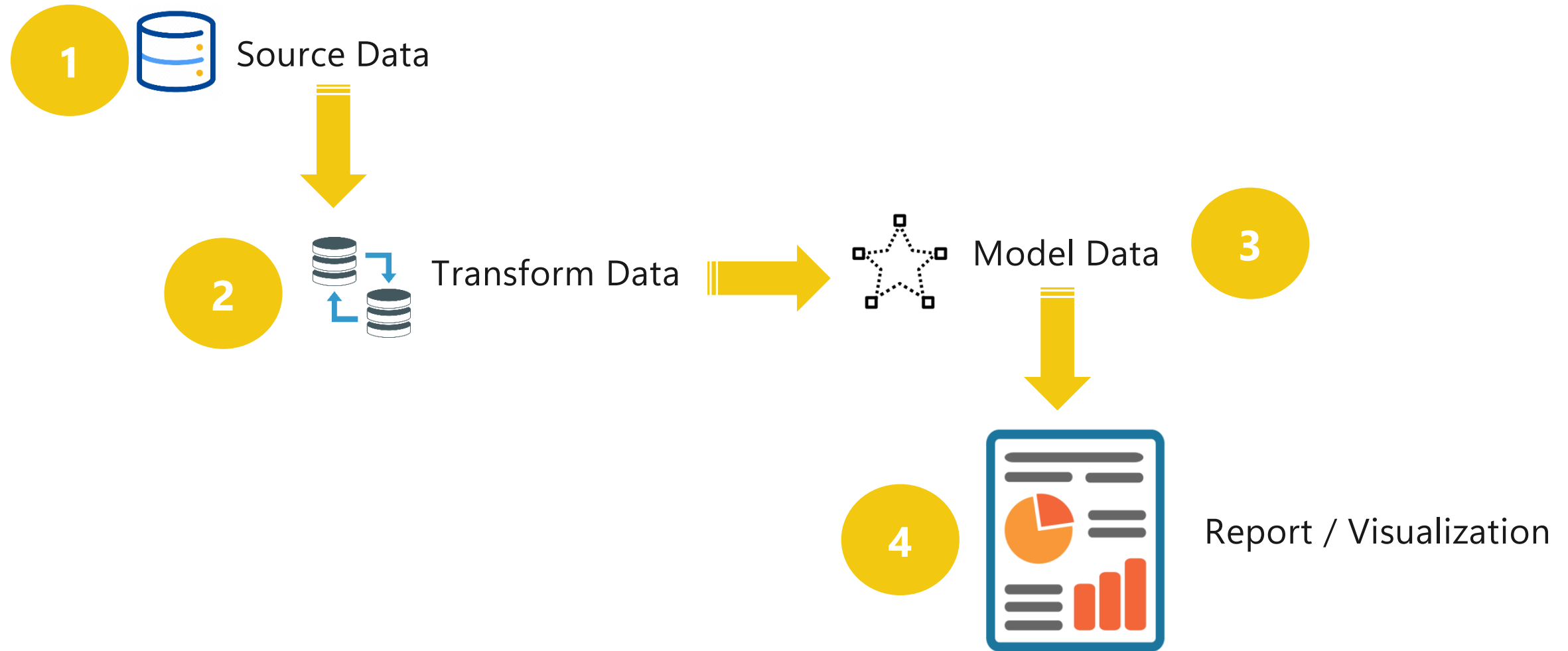




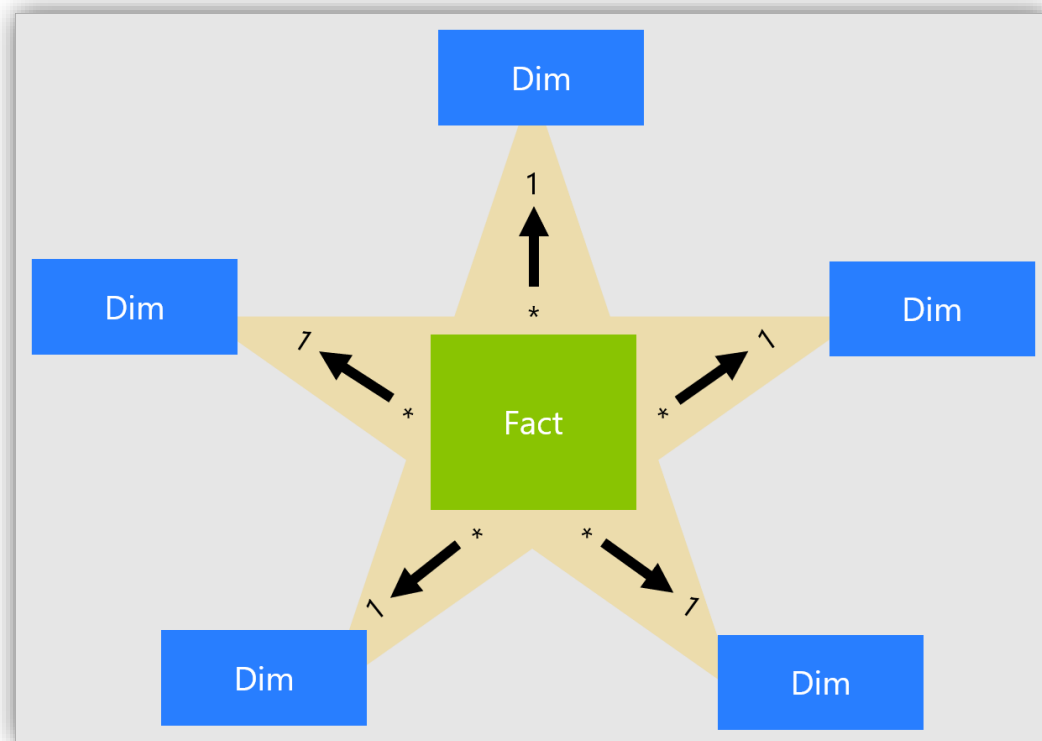
Data Analysis with Power BI

Basic Steps of Data Analysis & Visualization



Star Schema for Data Modelling

Star schema is a mature modeling approach widely adopted by relational data warehouses. It requires modelers to classify their model tables as either dimension or fact.





FACT TABLE

VS



DIMENSION TABLE

Fact Table

Order ID	Date	Product ID	Customer ID	Quantity	Price	Total Order Amount
123456	12-04-2000	1555	4564	3	1000	3000

Dimension Table

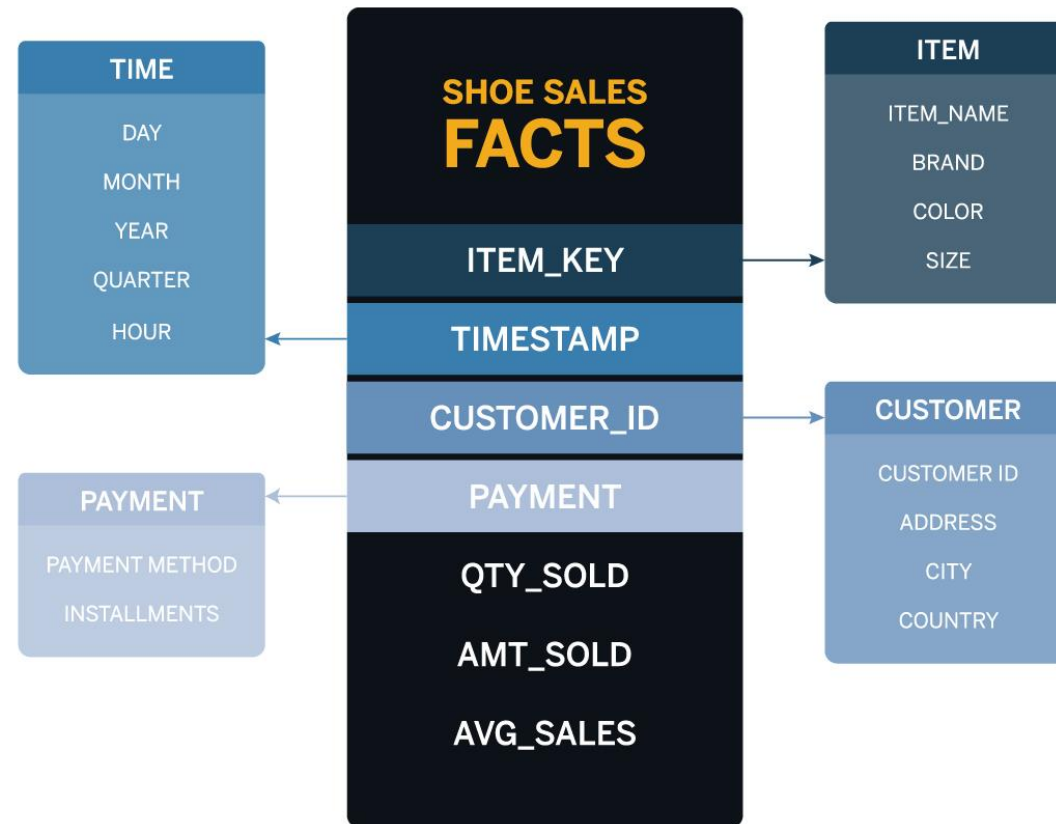
Product ID	Product Name	Category	Sub-Category	Brand	Price
1555	Chair	Furniture	Household	ABC	1000

Fact vs Dimension Table

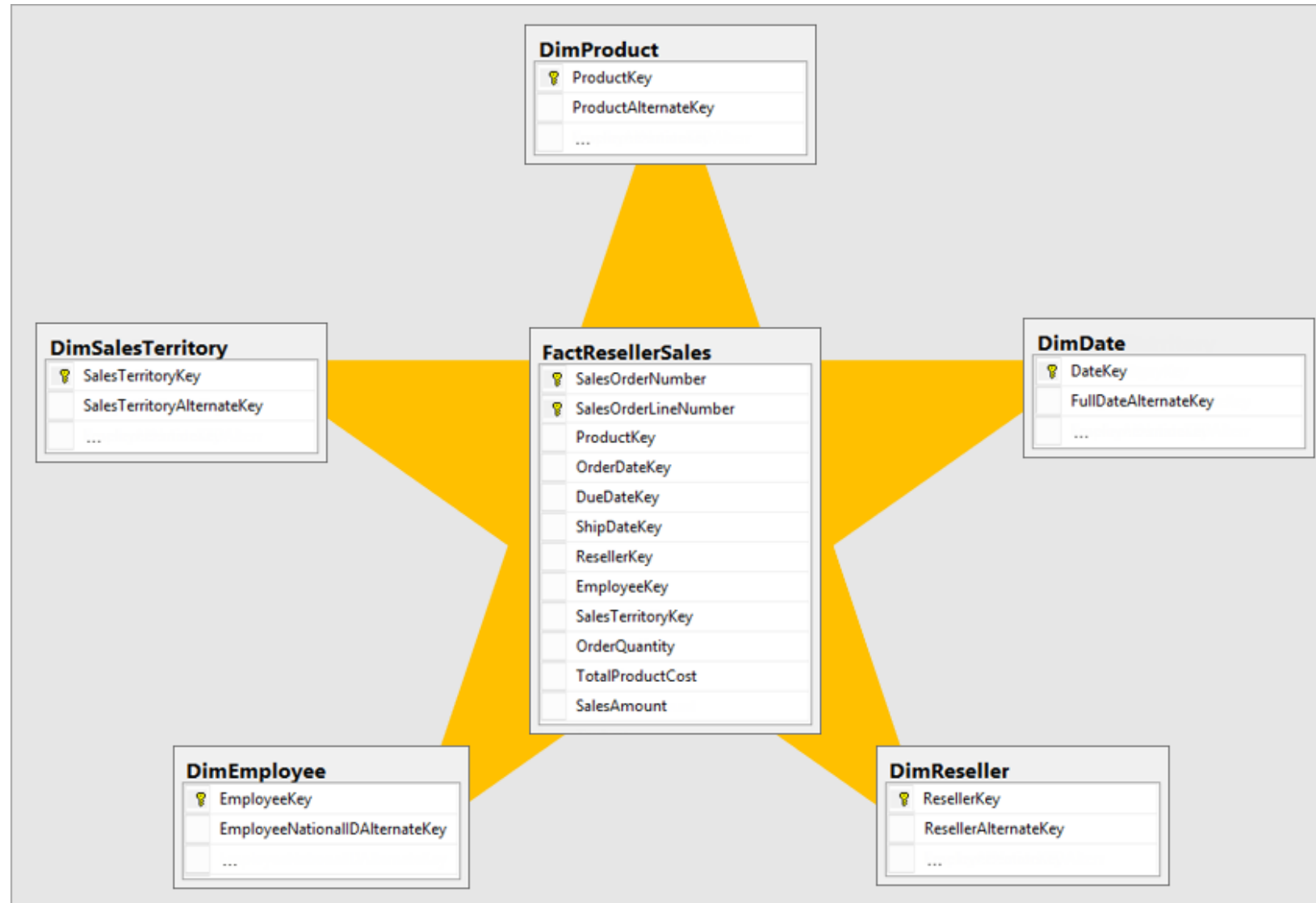
Basis	Fact Table	Dimension Table
Contents	Numeric values and transactional data.	Categorical data and descriptive attributes.
Purpose	Stores quantitative measures and metrics.	Provides descriptive attributes and context.
Size	Larger in terms of data volume.	Smaller in terms of data volume.
Aggregation	Aggregates data for analysis and reporting.	Provides context for data aggregation.
Querying	Provides data for analysis and calculations.	Used for filtering and categorization
Examples	Sales transactions and inventory levels.	Date, product, store, and customer dimensions
Rows	Many rows.	Fewer rows.

Star Schema

BEST RUN SHOES



Star Schema



Fact Table & Dimension Table



- Dimension tables support **filtering and grouping**
- Fact tables support **summarization**