

Business Metrics & Calculation Definitions

1. Total Revenue

Definition: Gross sales value across all transactions. Calculation: $\text{SUM}(\text{revenue})$. Used to measure business scale, not profitability.

2. Total Orders

Definition: Count of distinct transactions. Calculation: $\text{COUNT}(\text{DISTINCT sale_id})$. Represents demand volume.

3. Total Units Sold

Definition: Volume of products sold. Calculation: $\text{SUM}(\text{quantity})$. Helps identify product movement patterns.

4. Average Order Value (AOV)

Definition: Average revenue per order. Calculation: $\text{Total Revenue} / \text{Total Orders}$. Sensitive to pricing and product mix.

5. Monthly Revenue

Definition: Revenue aggregated by month. Calculation: $\text{SUM}(\text{revenue})$ GROUP BY `sale_year_month`. Used for trend analysis.

6. Monthly Orders

Definition: Orders aggregated by month. Calculation: $\text{COUNT}(\text{DISTINCT sale_id})$ GROUP BY `sale_year_month`. Separates demand from pricing effects.

7. Category-Level Revenue

Definition: Revenue aggregated by product category. Calculation: $\text{SUM}(\text{revenue})$ GROUP BY `Category_ID`. Identifies category dependency.

8. Metric Usage Constraints

Metrics must not be used to infer customer behavior, marketing ROI, or profitability without supporting data.