<div align="center">**DATA CALIBRATION EXPLANATION**</div>

What is Data Calibration?

Data calibration ensures that **numerical values accurately represent business reality** before analytics.

Calibration Rules Implemented

Rule 1: Sales Amount Validation

Business rule:

total_amount = quantity × unit_price − discount

Actions:

- Recalculate incorrect totals

- Replace invalid values

- Store corrected result in USD

Rule 2: Currency Normalization

- Source data contains multiple currencies

- All monetary values converted to **USD**

- Fixed exchange rates applied in Silver layer

- Ensures consistent reporting

Rule 3: Precision Enforcement

- Monetary fields stored as DECIMAL

- Rounded to defined scale

- Prevents floating-point inaccuracies

Invalid Data Handling

Examples of Invalid Data

- quantity ≤ 0

- unit_price ≤ 0

- Invalid product_id

- Invalid store_id

Handling Strategy

- Records routed to silver_sales_quarantine

- Rejection reason recorded

- Valid data continues downstream

Business Impact of Calibration

- Accurate KPIs

- Trusted revenue metrics

- Reduced reporting discrepancies

- Improved decision-making