**Business Case Study | Retail Sales Data Analysis**

**1. Problem Statement**

The objective of this case study is to analyse retail sales data to understand:

* Which regions and categories are profitable vs. loss-making.
* The impact of discounts on profitability.
* Seasonal trends affecting profit margins.
* Recommendations to improve business performance.

**2. KPIs**

* **Total Sales:** 488K
* **Total Orders:** 1,850
* **Total Profit:** 53K
* **Profit Margin:** 10.9%
* **Total Quantity Sold:** 6,962

**3. Key Findings**

* **Regional Performance:**
  + West is the most profitable (14.1% margin).
  + South is least profitable (7.2% margin).
  + Central suffers from very high discounts (22%), lowering profitability.
* **Category Performance:**
  + Office Supplies has the highest margin (21.6%).
  + Furniture is loss-making (–1.3%).
  + Technology has strong sales but only moderate margin (11%).
* **Discount Impact:**
  + Higher discounts directly reduce profitability.
  + Central region & Furniture category most affected.
* **Seasonality:**
  + Low profit months: Dec (5.1%), Sep (7.6%), Aug (8.4%).
  + High profit months: May (18.5%), Oct (18%), Feb (16.3%).

**4. Recommendations**

* Focus growth on **West region** and **Office Supplies category**.
* Reevaluate **Furniture pricing & discount strategy** to prevent losses.
* Reduce excessive discounts in **Central region**.
* Plan marketing & pricing adjustments in low-margin months (Dec, Sep, Aug).
* Replicate successful strategies from high-margin months (May, Oct).