# Retail Business Performance & Profitability Analysis

## Overview

This project analyses retail transaction data to evaluate sales performance and profitability. The objective is to identify profit-draining categories, understand discount impact, and uncover trends that support better business decisions.

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## Objectives

- Analyse sales and profit by category and sub-category
- Identify loss-making and low-profit products
- Study the impact of discounts on profitability
- Analyse monthly and regional sales trends

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## Dataset

- **Source:** Sample – Superstore
- **Type:** Retail transactional data
- **Key Fields:** Order Date, Category, Sub-Category, Sales, Profit, Discount, Region, Segment

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## Tools Used

- **SQL Server (SSMS):** Data cleaning and analysis
- **Power BI:** Interactive dashboard and visual insights
- **Excel:** Data validation and exports

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## Analysis Performed

- Category & Sub-Category profitability analysis
- Discount vs Profit analysis
- Monthly sales trend analysis

- Regional profit distribution
- Identification of loss-making products

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# Dashboard Highlights

- Total Sales & Total Profit KPIs
- Profit by Category bar chart
- Monthly Sales Trend line chart
- Discount vs Profit scatter chart
- Loss-Making Sub-Categories visualization
- Region-wise profit map

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# Key Insights

- **Technology** is the highest profit-generating category, while **Furniture** has the lowest profitability
- Sub-categories like **Tables and Bookcases** consistently generate losses
- Higher discounts do **not always increase profit**
- Sales show an upward trend in later months, indicating seasonality
- ₹2.30M in sales generated ₹286.82K profit, showing scope for margin improvement

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# Conclusion

This project demonstrates how SQL and Power BI can be used to analyze retail data and derive actionable business insights. The findings help improve pricing, discount strategies, and inventory decisions.