

Retail Business Performance & Profitability Analysis

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Project: Retail Business Profitability Dashboard


Tools Used: Power BI, SQL, Python (Pandas, Seaborn)

Key Insights

- **Sub-Category Profitability:** Some sub-categories consistently show **negative profit margins**, which indicates a need for **pricing optimization** or **cost control measures**.
- **Inventory Turnover:** Products with **longer inventory days** exhibit a **weak negative correlation** with profit margins, suggesting that **faster turnover** may improve profitability.
- **Regional Performance:** There are noticeable **sales and profit differences across regions**. Underperforming areas may benefit from **localized marketing strategies** or better logistics.
- **Seasonal Behavior:** Sales data reveals **seasonal trends**, with certain months showing higher volumes. This insight can help with **seasonal inventory planning**.
- **Stock Issues:** Identified **slow-moving and overstocked items** that contribute little to profit, tying up capital and storage.

Recommendations

-  **Reprice or Discontinue Loss-Making Products:** Focus on trimming or improving unprofitable sub-categories.
-  **Improve Shipping Efficiency:** Reduce shipping and processing delays to lower inventory holding time.
-  **Targeted Regional Strategies:** Create promotional offers and sales campaigns tailored for specific low-performing regions.
-  **Plan for Seasonal Peaks:** Use sales trend data to stock up on seasonal bestsellers ahead of demand spikes.

-  **Monitor Slow-Moving Inventory:** Regularly audit stock to avoid overstocking of low-demand products.