

Superstore Inventory Optimization Case Study

Akash kumar P R

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1 Objective

This case study analyzes the Superstore dataset to optimize inventory by identifying high- and low-performing product categories and sub-categories based on sales data, using Python (Pandas) for analysis.

2 Analysis

The dataset was analyzed by aggregating sales by category and sub-category. Key metrics include total sales, average sales per order, and order frequency. Findings:

- High Sales Categories: Technology leads with the highest total sales, followed by Furniture and Office Supplies.
- Top Sub-Categories: Phones and Chairs are the top performers, contributing significantly to revenue.
- Low Performers: Sub-categories like Bookcases and Tables have lower sales, indicating potential overstocking.

3 Recommendations

- Increase inventory for high-demand sub-categories like Phones and Chairs to capitalize on sales potential.
- Reduce stock for low-performing sub-categories like Bookcases and Tables to minimize holding costs.
- Implement targeted marketing for underperforming sub-categories to boost demand.

4 Conclusion

Data-driven inventory optimization can enhance efficiency and profitability. Future analysis could explore seasonal trends using Order Date to refine stock planning.