Business Report

Project Title: UrbanMart Retail Optimization Analysis

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Tools Used: Python, Excel, Tableau

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Note: This project was independently conducted with curated analytical support from ChatGPT. The AI was used as a collaborative assistant to simulate real-world Business Analyst mentorship, helping structure the workflow, validate analytical approaches, and refine business communication throughout the project.

1. Executive Summary

This project analyses sales, customer behavior, and inventory trends at UrbanMart using transactional data enriched with simulated inventory data. The objective was to uncover inefficiencies and recommend strategies to increase profitability and support better business decisions. The analysis combines data cleaning, exploratory analysis, KPI definition, and dashboarding using Python, Excel, and Tableau.

2. Key Insights

Sales & Profitability:

Total Gross Revenue: ~\$2.3M

- Total Profit: ~\$286K

- Average Profit Margin: ~12.5%

- Average Order Value (AOV): ~\$458

- Top-Selling Categories: Office Supplies, Technology

- Low-Profit Sub-Categories: Tables, Bookcases

Customer Behavior:

- Corporate Segment had high order volume but lower profitability per order

- Home Office Segment was most profitable per sale

Regional Analysis:

- West Region generated highest sales

- South Region had high discounting and lower profitability

- Discounting Impact:
 - Clear negative correlation between high discount levels and profit (more discounts -> less profit)
 - Products with discounts above 30% often become unprofitable

3. Recommendations

- Optimize Product Mix
 - Reduce or discontinue overstocked, low-performing sub-categories like Machines, Tables, and Bookcases
 - Scale successful products in fast-moving categories like Phones, Binders, and Accessories
- Adjust Discounting Policy
 - Implement stricter discount policies, limiting discounts above 20% for low-margin products
 - Analyze discount impact continuously with dashboards
- Focus on Profitable Segments
 - Launch targeted campaigns for Home Office customers
 - Reassess the Corporate strategy: maintain volume but focus on margin
- Regional Strategy
 - Audit the South Region's pricing and discounting practices
 - Scale best-selling products from the West Region into underperforming areas

4. Deliverables

File	Description
'Superstore_Cleaned.xlsx / .csv'	Cleaned dataset
'EDA.ipynb', 'KPI_Calculation.ipynb'	Jupyter Notebooks for full analysis
'EDA_UrbanMart.xlsx'	Pivot table & chart analysis in Excel
'Excel_Data_Cleaning.pdf',	Documentation of Excel workflows
'Excel_EDA.pdf'	
'Tableau_Dashboard_UrbanMart.twb / .pdf'	Interactive KPI dashboard
'UrbanMart Analytical Summary.pdf'	Full analytical report (EDA, KPIs)

'UrbanMart Business Report.pdf'	This final summary report

5. Appendix – Analytical Summary

For complete technical documentation of the methodology and insights – including charts, metrics, and visual outputs – please refer to: 'UrbanMart Analytical Summary.pdf' It includes:

- EDA insights (Top Products, Customer Segments, Regions, Discounting)
- KPI calculations (Revenue, Margin, AOV)