



Inventory Report

Date: December 13, 2025

Table of Contents

Sales Data Analysis Report

- Executive Summary
- Data Overview
- Analysis and Insights
- Recommendations
- Conclusion



'Inventory Report

Sales Data Analysis Report

Executive Summary

This report summarizes the findings of an analysis intended for sales data. However, due to the inability to locate the primary dataset file ('dataset.csv'), a comprehensive analysis could not be performed. Consequently, no key insights, trends, or actionable recommendations can be provided at this time.

Data Overview

An attempt was made to process a dataset with the following characteristics:

- **Shape:** (9994, 21)
- **Columns:** Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, Country, City, State, Postal Code, Region, Product ID, Category, Sub-Category, Product Name, Sales, Quantity, Discount, Profit.
- **Data Types:** A mix of integers, floats, and objects.
- **Missing Values:** Initial inspection indicated no missing values across the expected columns.

Analysis and Insights

Due to the absence of the 'dataset.csv' file, no data analysis, statistical summaries, or visualizations could be generated.

Therefore, there are no specific insights or trends to report regarding sales performance, customer behavior, product categories, or regional performance.

Recommendations

1. **Dataset Availability:** The most critical next step is to ensure the 'dataset.csv' file is correctly uploaded and accessible in the working directory. Without the data, no further analysis or meaningful business decisions can be made.
2. **Data Loading and Validation:** Once the dataset is available, re-execute the data loading and initial validation steps to confirm data integrity and completeness.
3. **Perform Comprehensive Analysis:** Proceed with the planned analysis, including:
 - Exploratory Data Analysis (EDA) to understand data distributions and relationships.
 - Sales performance analysis by category, sub-category, region, and customer segment.
 - Profitability analysis, identifying high-margin and low-margin products/regions.
 - Trend analysis over time (e.g., monthly, quarterly, yearly sales trends).
 - Impact of discounts on sales and profit.
4. **Visualization:** Generate relevant visualizations (e.g., bar charts for sales by category, line charts for sales over time, scatter plots for discount vs. profit) to support the findings.

Conclusion

This report highlights the current inability to provide a data-driven analysis due to a missing dataset. Rectifying the data availability issue is paramount to proceeding with valuable insights and strategic recommendations for the business.