Inventory Analysis Dashboard

Comprehensive Overview

OVERVIEW

- This is a supply chain analytics project. In which conducted an analysis of supply chain inefficiencies, and developed informative dashboards to inform business stakeholders of potential issues, along with proposing strategic business enhancements.

Fulfillment Time Analysis

- A line chart depicting the fulfillment time analysis with Order Fulfilment Days on the x-axis and No of warehouse on the y-axis.

- Key insights:

- Performance metrics for various periods.

- Identification of trends over time.


Fulfilment Time Analysis

Warehouse Inventory by Month and Product

- A bar chart showing inventory levels for different products by month.

- Key products included:

- Adidas Brazuca

- Adidas Kids' Apparel

- Adidas Men's Footwear

- Insightful analysis on stock levels and monthly trends.
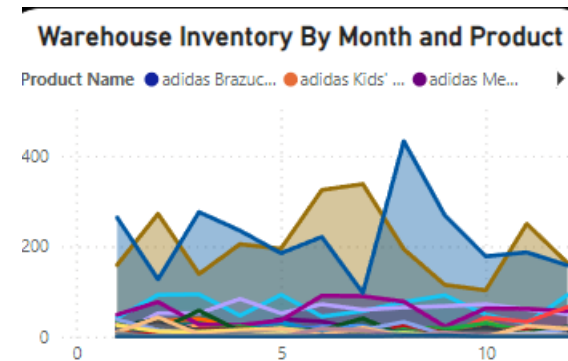
Sales vs Discount by Product Category

- A comparison of sales and discounts across various product categories.

- Categories analyzed:

- Fishing

- Cleats

- Camping Equipment

- Cardio Equipment

- Women's Apparel

- Water Sports etc..

Sales VS DiscounT by Product Category

● Sum of Gross Sales   ● Sum of Discount %
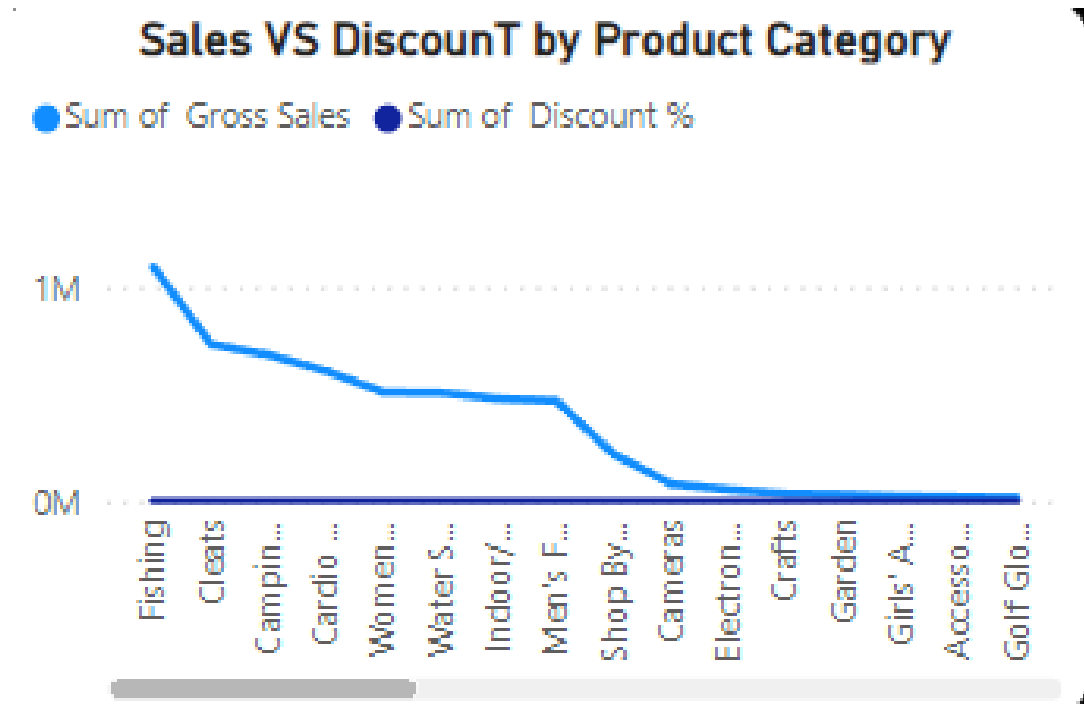
Sales vs Profit

- An analysis of sales compared to profit margins.
- Key findings:
- Profit percentages for different departments:
- Cleats: 13.9%
- Men's Footwear: 12.45%
- Women's Apparel: 11.71%
- Indoor/Outdoor Equipment: 11.08%
- Fishing: 9.39%
- Water Sports: 8.71%
- Other categories: Lower percentages.
- Visual representation includes a bar chart or a line chart.
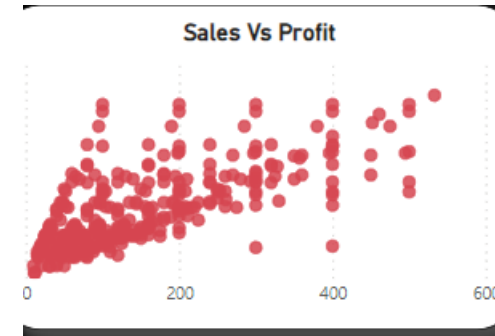
Average Warehouse Order Fulfillment (Days)

- A chart displaying the average fulfillment time for various product departments.
- Departments included:
- Apparel
- Book Shop
- Discs Shop
- Fan Shop
- Fitness
- Footwear
- Golf
- Health and Beauty
- Outdoors
- Pet Shop
- Technology
- Analysis of order fulfillment efficiency and performance metrics.

Average of Warehouse Order Fulfillment (days)

5.33

0.00　　　　　10.67
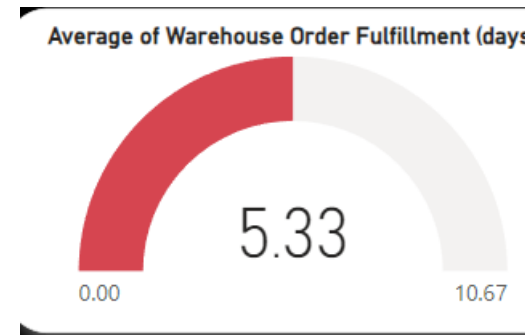
Insights

- **Fulfillment Time Analysis**:
  - Fulfillment times vary significantly.
  - There are peaks and troughs, indicating inconsistent efficiency.

- **Warehouse Inventory by Month and Product**:
  - Inventory levels fluctuate, with some products consistently overstocked.

- **Sales vs Discount by Product Category**:
  - High gross sales in categories like Fishing, Cleats, and Cardio Equipment.
  - Moderate discounts in Women's Apparel and Men's Footwear indicate strong demand.

Insights

Sales vs Profit:

• High profits in Cleats, Men's Footwear, and Women's Apparel.

• Lower profit margins in Fishing and Water Sports.

Average Warehouse Order Fulfillment (Days):

• Apparel and Footwear have faster fulfillment times.

• Health and Beauty, Technology departments have slower times.

Recommendations

Optimize Fulfillment Processes:
- Improve processes for products with higher fulfillment times.
- Standardize best practices across departments.

Inventory Management:
- Implement a just-in-time inventory system.
- Adjust reorder levels based on sales trends.

Discount Strategy:
- Re-evaluate discounts for low sales categories.
- Use targeted promotions to boost sales.

- **Profit Margin Improvement:**
- Reduce costs in low-margin categories.
- Adjust pricing strategies to improve profits.

Sales and Marketing Focus:
- Promote high-profit categories more.
- Explore cross-selling for lower-performing categories.

Data-Driven Decision Making:
- Use analytics to predict demand and optimize inventory.
- Monitor KPIs and adjust strategies based on data.