### **Priyal Mehta**

## Unique thing

**Shipping Cost & Delivery Time Optimization**

Analyzed **shipping costs across different shipping methods** (Regular Air, Delivery Truck, and Express Air) and found that **Delivery Trucks had the highest cost variation**. Additionally, by studying delivery times, we identified outliers where deliveries were significantly delayed. This allowed for a deeper understanding of **logistics efficiency**, helping pinpoint areas where cost savings and faster shipping solutions could be implemented to improve customer satisfaction and operational efficiency.

Business Insights from Analysis

1. Product Category Performance

Technology products generate the highest profit, making them the most financially valuable category.

Office Supplies maintain stable sales and moderate profitability, contributing consistently to revenue.

Furniture has strong sales but significantly lower profit margins, indicating high costs or low pricing effectiveness.

2. Customer Sentiment and Product Reviews

Most customer reviews are positive, with a majority of ratings being 4 or 5 stars.

Negative reviews frequently mention storage devices such as SD cards, with complaints about reliability and durability.

Customers often highlight issues related to product failures and defects in lower-rated reviews.

3. Shipping and Delivery Performance

Delivery times are generally short, but a few outliers indicate significant delays.

Delivery Trucks are the most expensive shipping method, with considerable variation in shipping costs.

Regular Air and Express Air have relatively lower costs but may not be suitable for all product types.

4. Impact of Discounts on Profitability

There is no clear correlation between higher discounts and increased profitability.

In certain cases, higher discounts lead to lower overall profit margins, suggesting that discounting strategies may not be optimized.

Some discounted products show no significant increase in sales, indicating that price reductions alone may not drive demand.

5. Customer Lifetime Value and Spending Patterns

High-value customers, such as Emily Phan and Deborah Brumfield, contribute significantly to total revenue.

Some customers place fewer but high-value orders, while others generate steady revenue through frequent smaller transactions.

The most valuable customers exhibit distinct purchasing behaviors, impacting overall sales and profitability.

6. Sales Prediction and Data Trends

Sales predictions based on discounts, unit price, and shipping costs show room for improvement in accuracy.

Additional external factors such as seasonality, marketing efforts, and brand reputation may influence sales outcomes.

Current predictive models suggest that pricing strategies and shipping costs play a substantial role in determining sales volumes.

https://github.com/priyal-h-m/Priyal\_Mehta\_Test