

Customer & Product Profitability Analysis

Introduction:

This project analyzes customer transaction data to identify the most profitable products and the most loyal customer segments. Its goal is to help the marketing team focus on the most valuable customers and optimize product positioning to improve sales.

Objectives:

This project analyzes customer transaction data to help businesses identify:

1. The three most profitable products generating the highest revenue.
2. The most loyal customer segments based on transaction frequency.
3. Insights into customer life stages and spending behaviors to optimize marketing strategies.

Key Findings:

Top 3 Most Profitable Products:

- ***Dorito Corn Chips Supreme 380g*** – Highest revenue generator.
- ***Smiths Crinkle Chip Original Big Bag 380g*** – Second highest-selling product.
- ***Smiths Crinkle Chips Salt & Vinegar 330g*** – Also among the top revenue generators.
- These products likely perform well due to **brand popularity, larger packaging, and frequent consumption** by snack lovers.

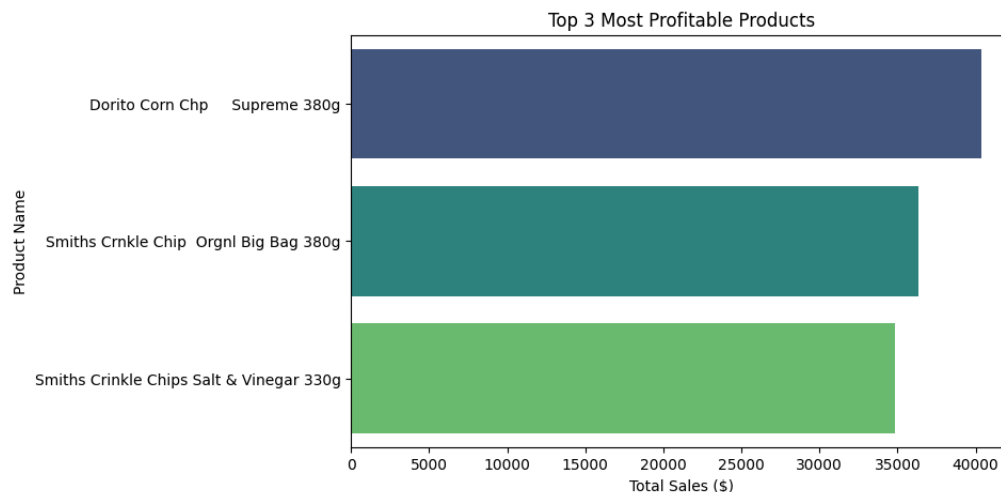


Fig 1. Visualization of Top 3 Profitable Products

Most Profitable Customers: Customers with the highest transaction counts were identified, with some making up to **18 purchases** during the period.

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➡ Top 10 Profitable Customers:
  LYLTY_CARD_NBR
172032      18
162039      18
230078      17
128178      17
13138       17
116181      17
222242      16
94185       16
113080      16
109036      16
Name: count, dtype: int64

```

Fig 2. Top 10 Profitable Customers

Customer Segment Analysis: Most frequent shoppers belong to the "Older Families (Budget Shoppers)," "Retirees (Mainstream Shoppers)," and "Young Singles/Couples (Mainstream Shoppers)" segments.

- **Older Families (Budget Shoppers):** Likely prefer larger, more affordable packaging.
- **Retirees (Mainstream Shoppers):** May prioritize trusted, established brands.
- **Young Singles/Couples (Mainstream Shoppers):** Likely value convenience and mid-range pricing.

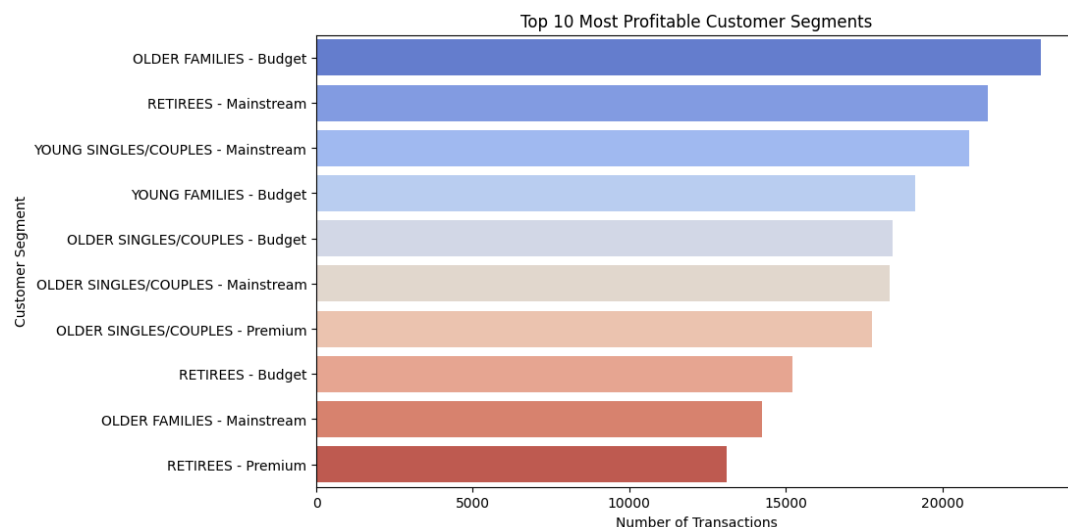


Fig 3. Visualization of Top 10 Most Profitable Customer Segments

