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Report: Customer & Product Analysis for Marketing Strategy

1. Introduction

The goal of this analysis is to help the marketing department focus on the most profitable customer segments and best-selling products. By identifying high-value customers and top-performing products, we can refine marketing strategies and optimize business growth.

2. Data Overview

Two datasets were provided for analysis:

1. **purchase_behaviour.csv**
 - Contains customer details: **LYLTY_CARD_NBR**, **LIFESTAGE**, and **PREMIUM_CUSTOMER**.
 2. **transaction_data.csv**
 - Contains transaction details: **LYLTY_CARD_NBR**, **PROD_NAME**, **PROD_QTY**, **TOT_SALES**, and more.
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3. Exploratory Data Analysis (EDA)

3.1 Checking for Missing Values

No missing values were found in either dataset, ensuring a clean dataset for analysis.

3.2 Summary Statistics

- The dataset contains transactions from various customer segments.
- The total revenue across all transactions was **₹3.2 million**.
- The average transaction value per customer varied based on **LIFESTAGE** and **PREMIUM_CUSTOMER** type.

3.3 Distribution of Customer Segments

- Majority of the customers belong to **Older Families, Young Singles/Couples, and Retirees**.
- **Premium, Mainstream, and Budget** categories are well distributed across life stages.

A visualization was created to show customer segment distribution.

4. Analysis & Key Findings

4.1 Top 3 Most Profitable Products

Rank	Product Name	Total Sales (₹)
1	Dorito Corn Chip Supreme 380g	40,352.00
2	Smiths Crinkle Chip Original Big Bag 380g	36,367.60
3	Smiths Crinkle Chips Salt & Vinegar 330g	34,804.20

Insights:

- The top-selling products are large-sized snack packs.
- Likely purchased by families or bulk buyers.

4.2 Most Loyal Customer Segments

Rank	Customer Segment	Total Sales (₹)
1	Older Families (Budget Buyers)	168,363.25
2	Young Singles/Couples (Mainstream Buyers)	157,621.60
3	Retirees (Mainstream Buyers)	155,677.05

Insights:

- **Older Families (Budget Buyers)** contribute the highest revenue, likely due to bulk purchasing.
- **Young Singles/Couples (Mainstream Buyers)** have high spending, possibly influenced by convenience and brand preference.

- **Retirees (Mainstream Buyers)** consistently purchase, preferring well-known brands.
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5. Business Recommendations

5.1 Marketing Strategies for Loyal Customers

- **Older Families (Budget Buyers):**
 - Introduce **family packs or bulk discounts** to encourage larger purchases.
 - Promote **budget-friendly combo offers** for high-demand snacks.
- **Young Singles/Couples (Mainstream Buyers):**
 - Focus on **impulse-driven promotions**, such as **limited-time discounts** and **online ads**.
 - **Subscription-based snack boxes** could increase recurring purchases.
- **Retirees (Mainstream Buyers):**
 - Leverage **nostalgic marketing campaigns** (e.g., classic flavors, premium packaging).
 - Provide **exclusive senior citizen discounts** on popular snack brands.

5.2 Optimizing Product Marketing

- **Highlight top-selling snack products** in ads and promotions.
 - **Use customer data to personalize recommendations** for each segment.
 - **Offer promotions on complementary products** to increase basket size.
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6. Conclusion

By analyzing transaction data, we identified:

- ✓ **Top 3 most profitable products** – Large-sized chips/snack packs.
- ✓ **Most loyal customer segments** – Older Families (Budget), Young Singles/Couples (Mainstream), and Retirees (Mainstream).
- ✓ **Actionable marketing strategies** – Targeted promotions, bundle offers, and personalized recommendations.