

TASK 3

TASK 1: Overview

01 Objective

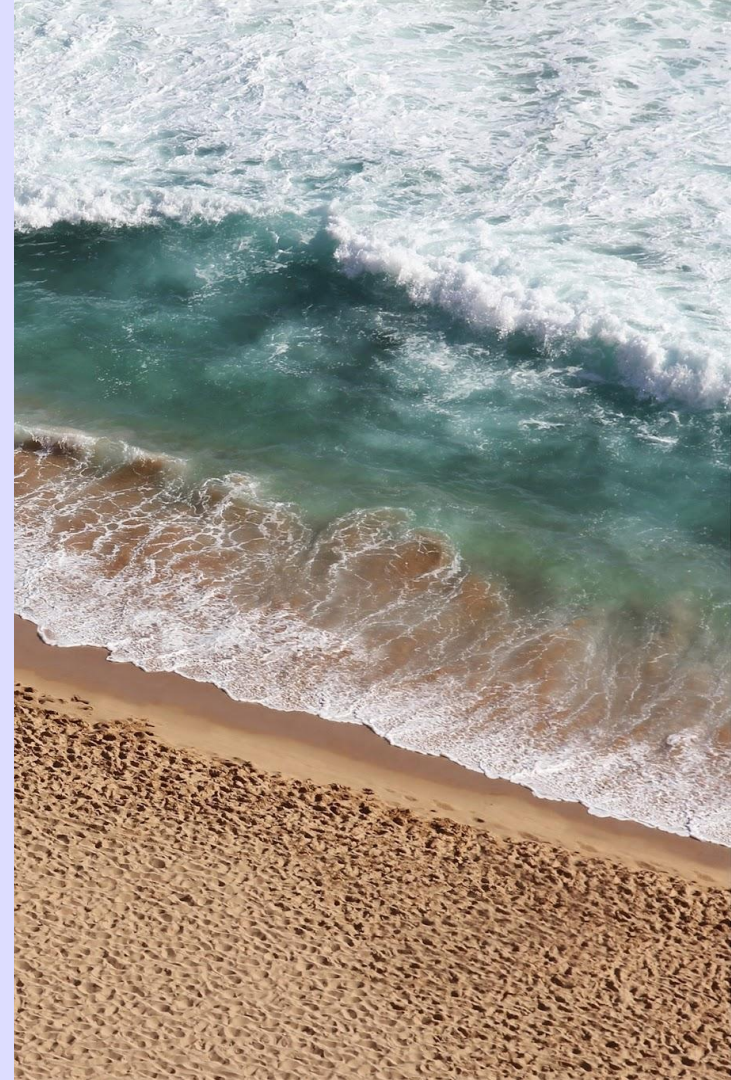
Analyze sales data to identify key trends and insights.

02 Dataset Sources:

- QVI Transaction Data
- QVI Purchase Behavior Data

03 Focus Area:

- Customer segmentation
- Brand performance
- Product pack size popularity

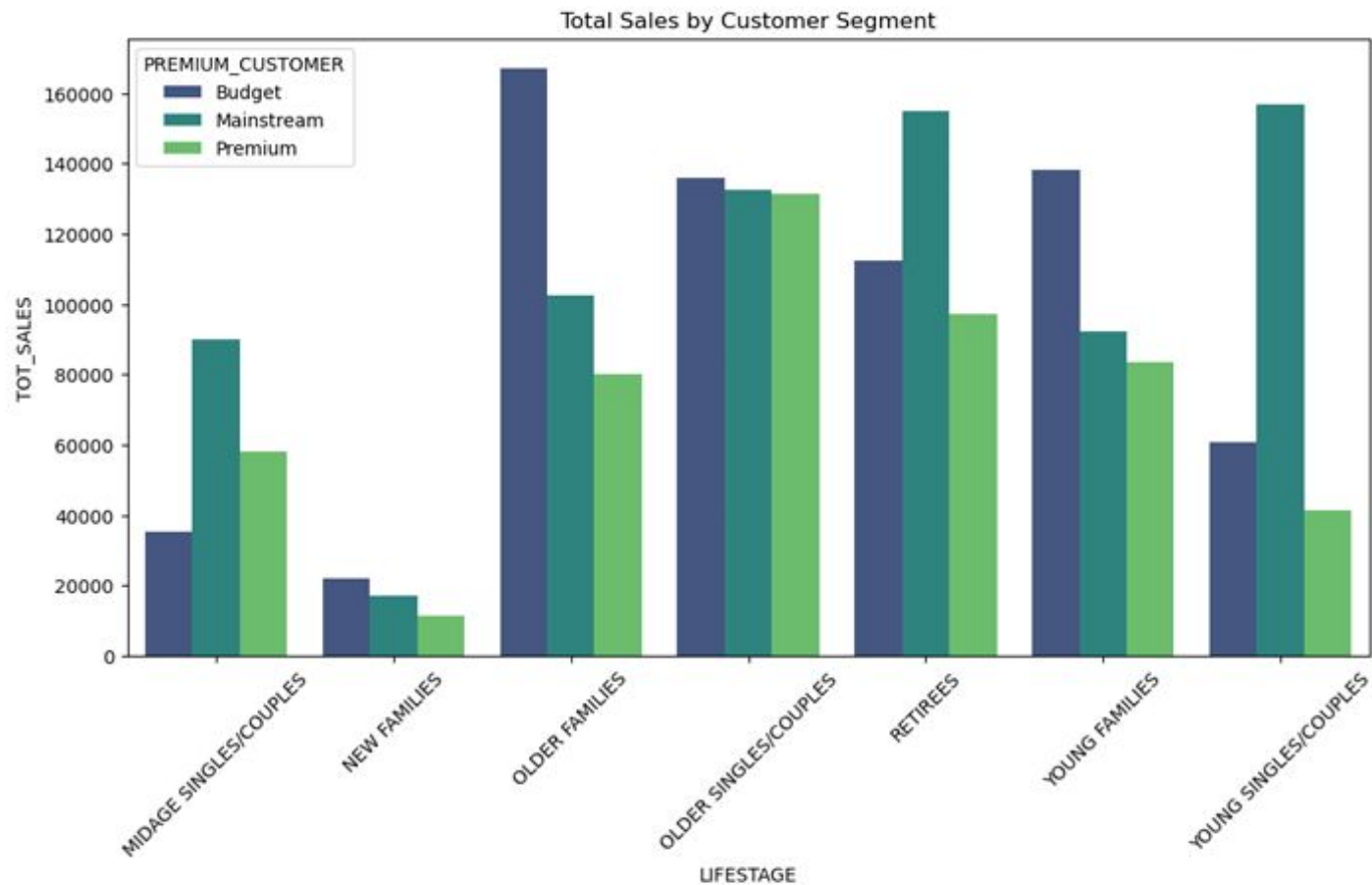


Data Preparation

- Outliers in "TOT_SALES" were removed.
- Product names parsed to extract:
 - Pack size
 - Brand name

Customer Segmentation

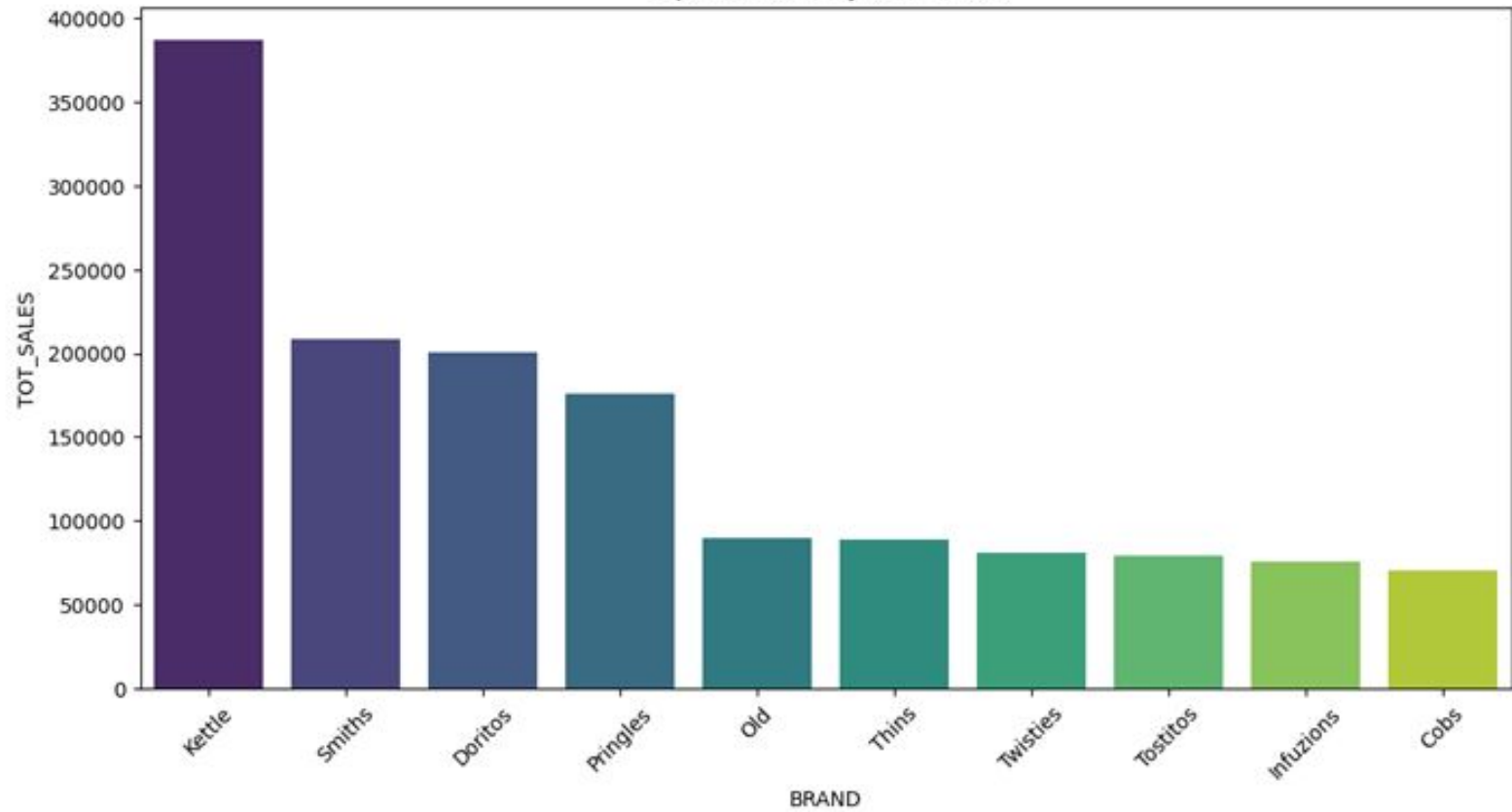
- Customers grouped by:
 - LIFESTAGE: (e.g., Young Singles/Couples, Older Families)
 - PREMIUM_CUSTOMER: (Premium, Mainstream, Budget)
- Key Findings:
 - Premium customers had higher total sales.
 - Young Singles/Couples showed significant spending.



Top Brands Analysis

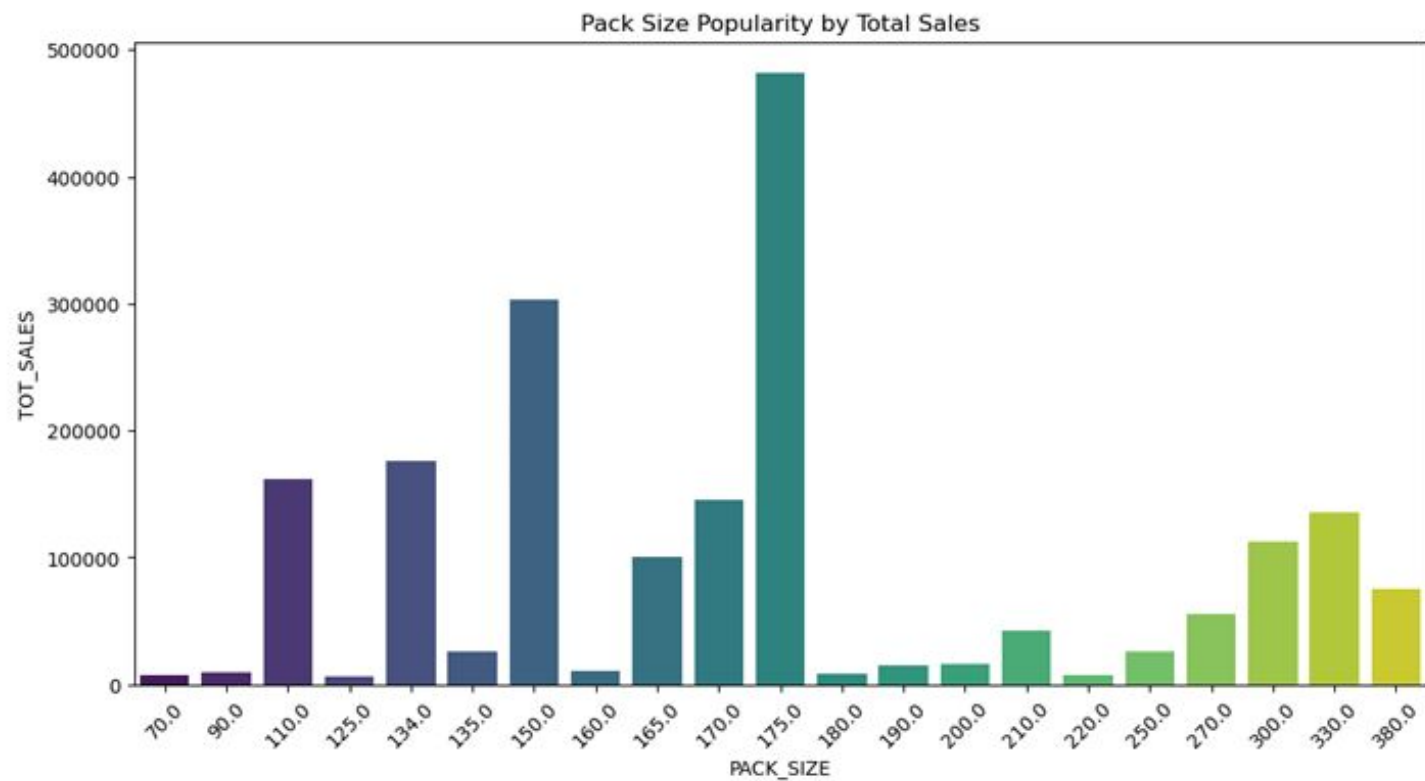
- Top Performing Brands
 - Identified top 10 brands by total sales.
 - Significant revenue contributors.
 - Highlights consumer preference for well-known brands.

Top 10 Brands by Total Sales



Pack Size Trends

- Pack Size Popularity
 - Extracted pack size data from product names.
- Key Findings:
 - Certain pack sizes (e.g., 175g, 150g) dominate sales.
 - Indicates consumer preference for specific product sizes.



TASK 1: Overview

01 Objective

Compare trial and control stores to evaluate sales impact.

02 Dataset Sources:

- QVI Transaction Data

03 Focus Area:

- Pre-trial and trial period analysis
- Store-wise comparison



Data Preparation

- Dropped duplicates.
- Added derived columns:
 - Extracted month and year from transaction dates.
 - Aggregated monthly data for each store:
 - Monthly sales revenue
 - Monthly customers
 - Transactions per customer

Trial and Control Stores

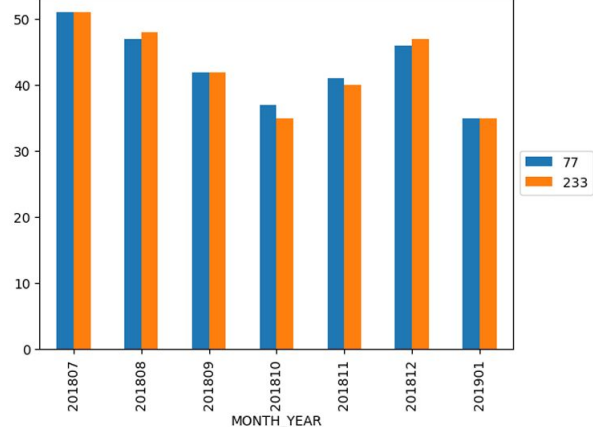
- Trial stores and their corresponding control stores:
 - Trial Store 77: Control Store 233
 - Trial Store 86: Control Store 155
 - Trial Store 88: Control Store 40
- Control stores were selected based on correlation of pre-trial metrics (sales, customers, transactions).

Pre-Trial Insights (July 2018 - January 2019)

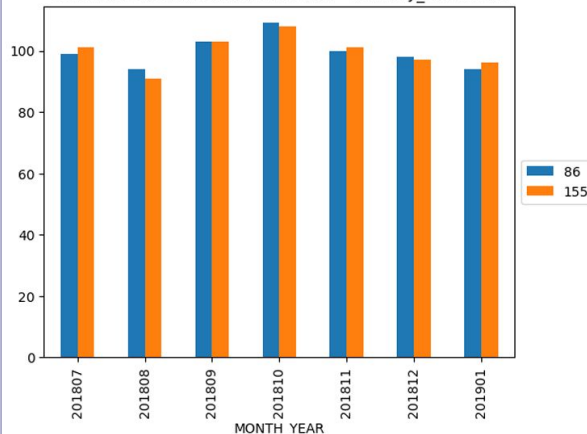
- Compared metrics (sales, customers, transactions) for trial and control stores.
- Found strong alignment in trends, validating control store selection.

Pre-Trial Comparison of Monthly Customers

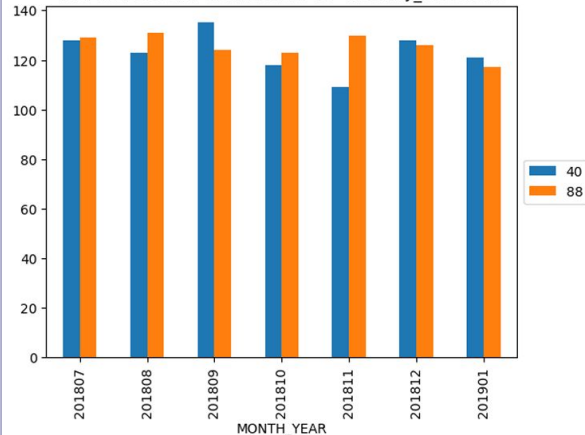
Trial Store 77 and Control Store 233 - monthly_customers



Trial Store 86 and Control Store 155 - monthly_customers

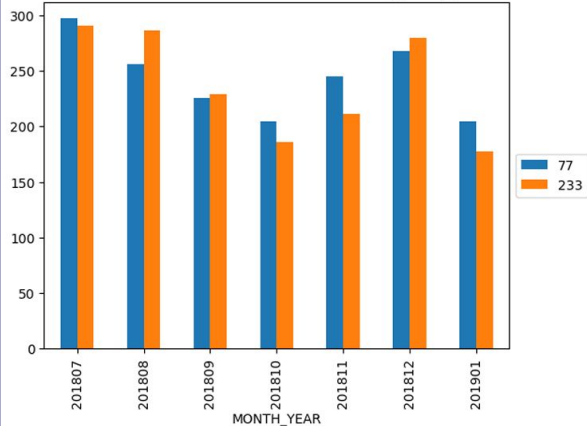


Trial Store 88 and Control Store 40 - monthly_customers

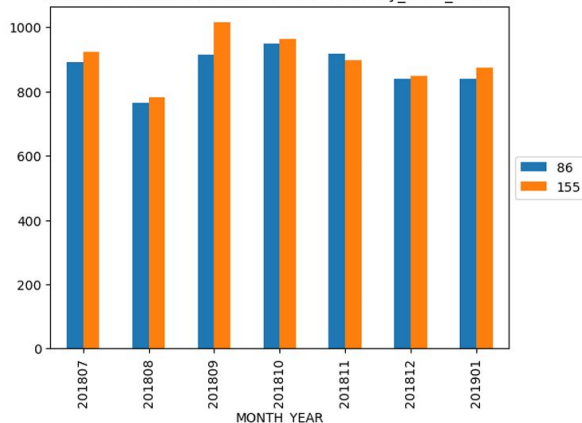


Pre-Trial Comparison of Monthly Sales Revenue

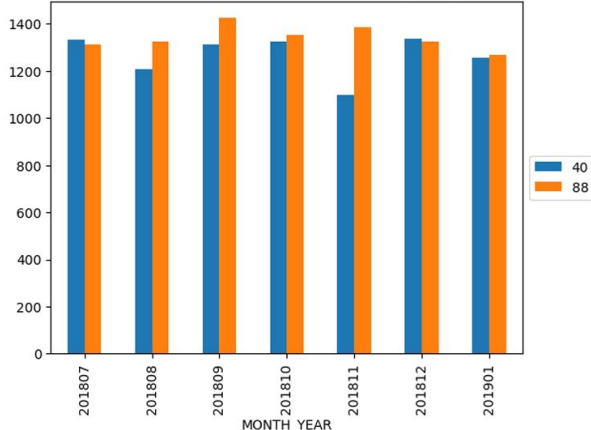
Trial Store 77 and Control Store 233 - monthly_sales_revenue



Trial Store 86 and Control Store 155 - monthly_sales_revenue



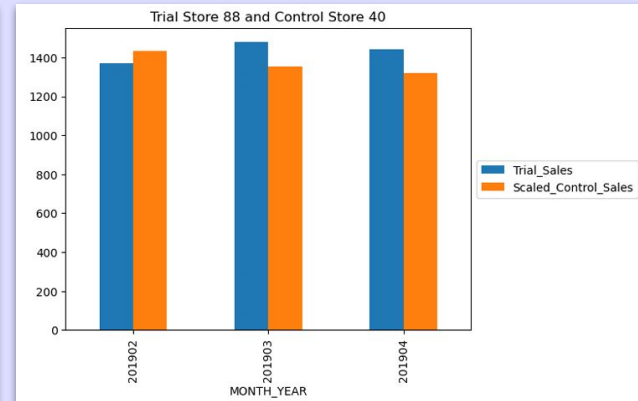
Trial Store 88 and Control Store 40 - monthly_sales_revenue



Trial Period Insights (February 2019 - April 2019)

- Significant findings during the trial period:
- Total sales increased across all trial stores.
- Number of customers rose notably.
- Percentage increase in total sales compared to control stores:
 - Store 77: 26.15%
 - Store 86: 13.15%
 - Store 88: 4.35%
- Percentage increase in customer numbers compared to control stores:
 - Store 77: 23.07%
 - Store 86: 13.54%
 - Store 88: 4.45%

Trial Period Comparison of Monthly Sales Revenue



Trial Period Comparison of Monthly Customers

