RETAIL ANALYTICS STRATEGY

Category Review: Chips

Data-Driven Insights & Trial Assessment

December 2025 | Quantium Virtual Internship

EXECUTIVE SUMMARY

Category Drivers

- **Target Identified:** "Mainstream Young Singles/Couples" are the priority segment.
- **High Value:** Despite smaller basket sizes, they pay a significantly **higher price per unit**.
- **Clear Preferences:** Strong affinity for *Tyrrells*, *Twisties*, and *Doritos* in larger pack sizes.

Trial Outcome

- **Methodology:** Control stores selected via rigorous correlation & magnitude matching (Pre-trial).
- **Success:** Stores 77 & 88 showed **statistically significant uplift** in sales.
- **Action:** Trial strategy is validated for rollout; Store 86 requires root-cause analysis.

CATEGORY OVERVIEW: THE RETAIL LANDSCAPE

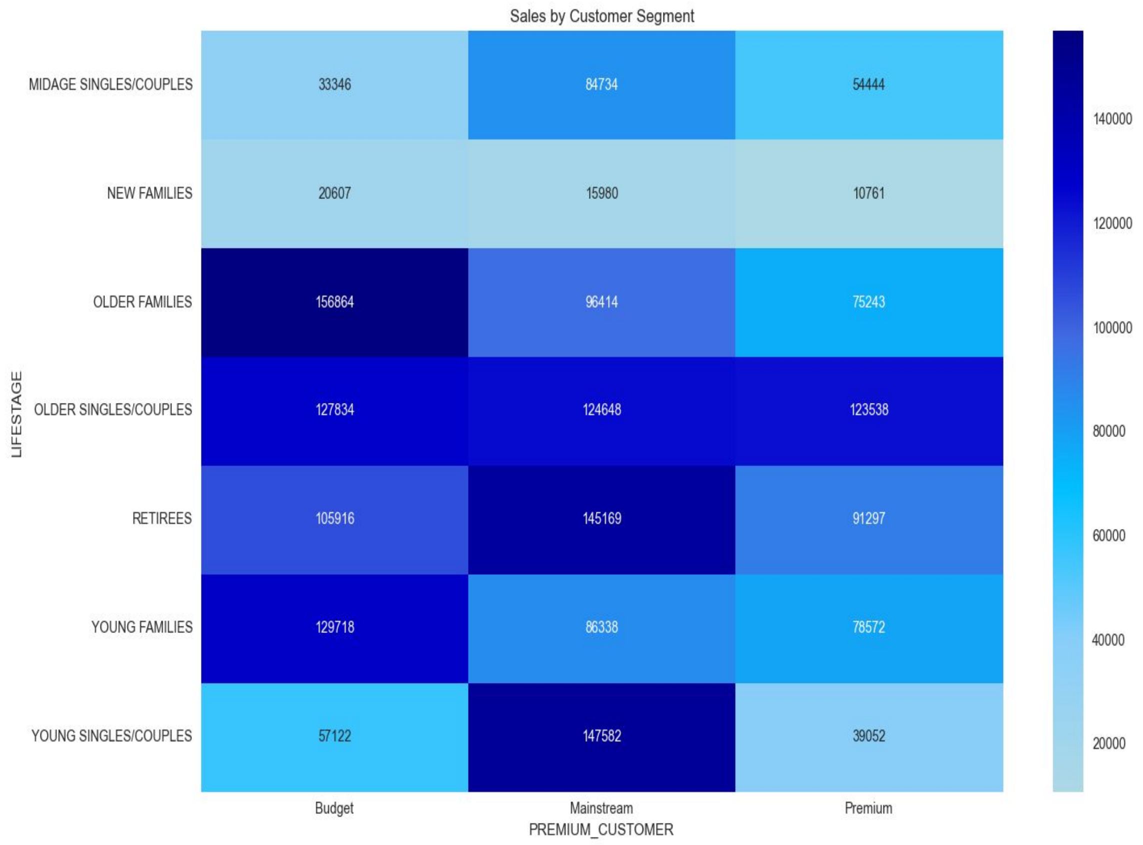
Understanding the Chip Aisle

The chip category is highly competitive with high product density. Our analysis of transaction data reveals distinct purchasing behaviors across life stages.

> *"Affluence drives behavior: Premium customers shop differently than Budget families."*

We analyzed over 260,000 transactions to map these patterns.

TARGET IDENTIFICATION: WHO DRIVES VALUE?



The "Mainstream Young Singles/Couples" Opportunity

While **Older Families** drive volume through sheer pack count, **Young Singles/Couples** in the Mainstream segment are critical for value growth.

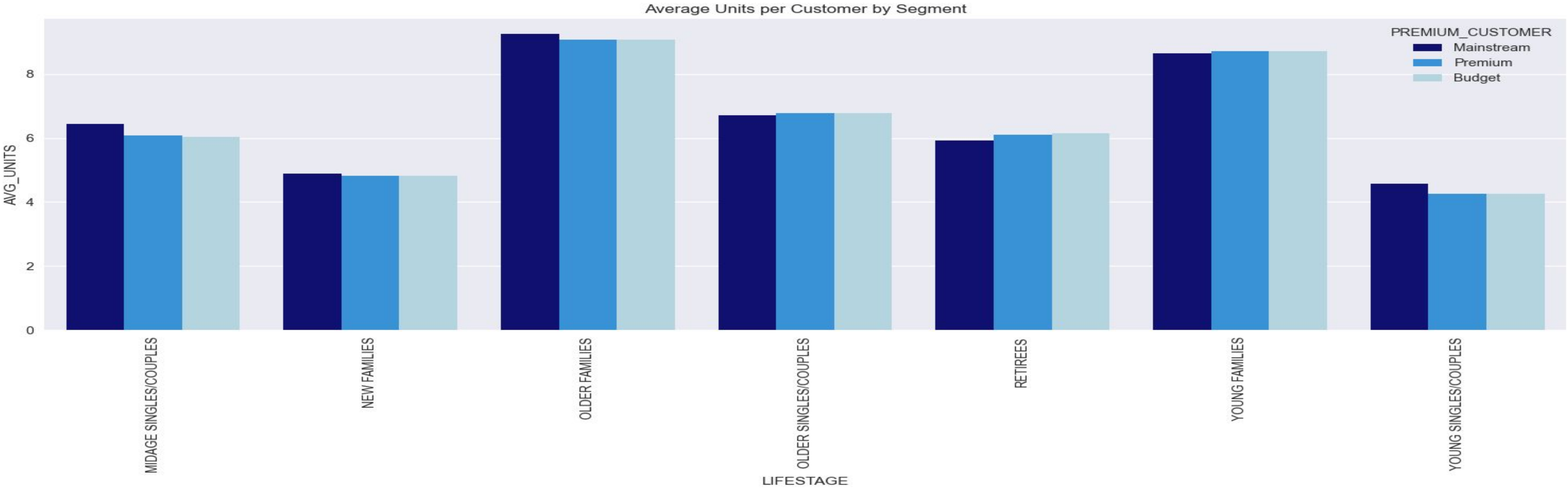
- **Large Population:** A significant portion of the customer base.
- **Premium Tendency:** Less price-sensitive than budget families.
- **Impulse Driven:** Likely to purchase smaller, higher-margin formats or premium brands.

BEHAVIORAL INSIGHT: WILLINGNESS TO PAY

Price Per Unit Analysis

Statistical testing (T-Test) confirms a significant difference in spending behavior ($p < 0.05$).

Mainstream Young Singles/Couples consistently pay more per unit than Budget/Premium segments, indicating a willingness to pay for brand equity over value packs.



STRATEGIC ALIGNMENT: WHAT DO THEY BUY?

Mainstream Young Singles/Couples show >20% higher affinity for these brands compared to the general population.

Tyrrells
High affinity for premium positioning. Indicates a desire for quality.

Twisties
Strong preference for established, flavorful snack brands.

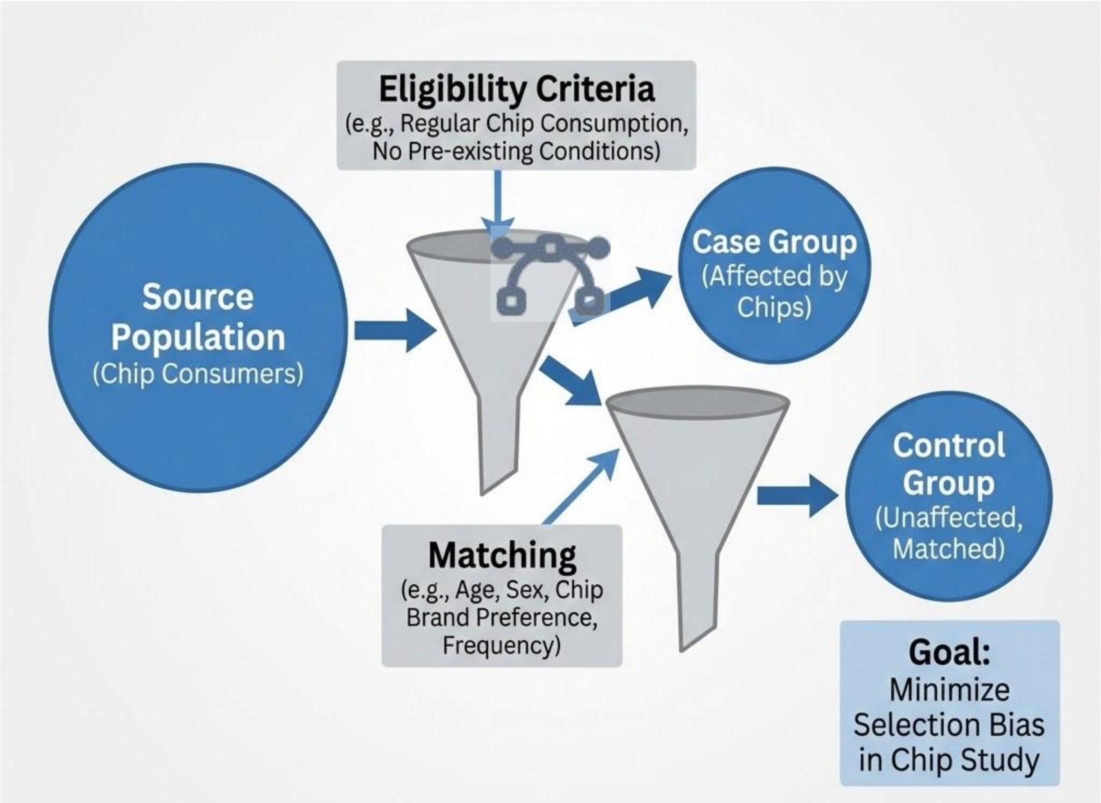
Doritos
Consistently high volume brand for this demographic.

Pack Size
Preference for **270g** packs (Sharing size) over multipacks.

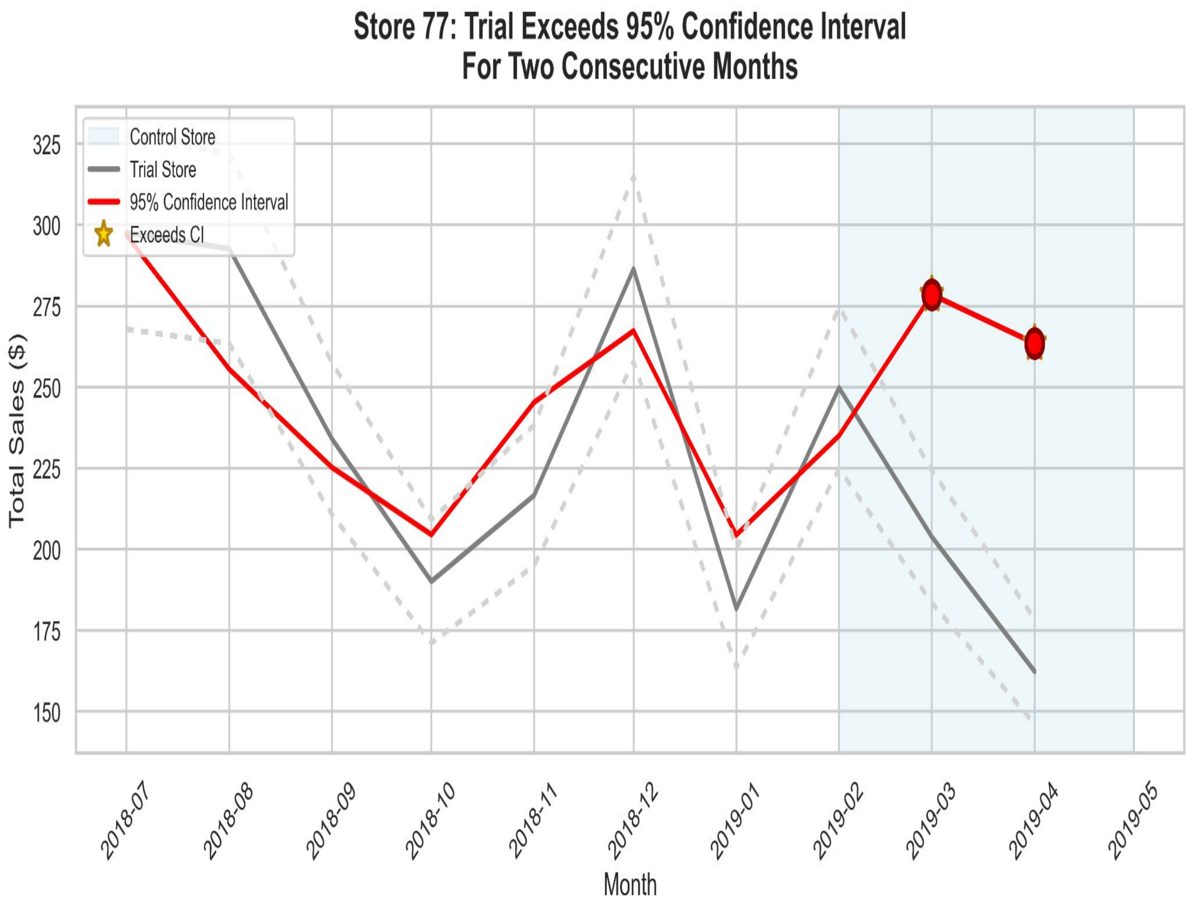
TASK 2: TRIAL METHODOLOGY

Rigorous Control Store Selection
To ensure valid A/B testing, we selected control stores based on pre-trial performance (July 2018 - Jan 2019).

- **Correlation (0.5 Weight):** Ensuring sales trends move in sync over time.
- **Magnitude (0.5 Weight):** Ensuring total sales volumes are comparable.



TRIAL PERFORMANCE: STORE 77 (SUCCESS)



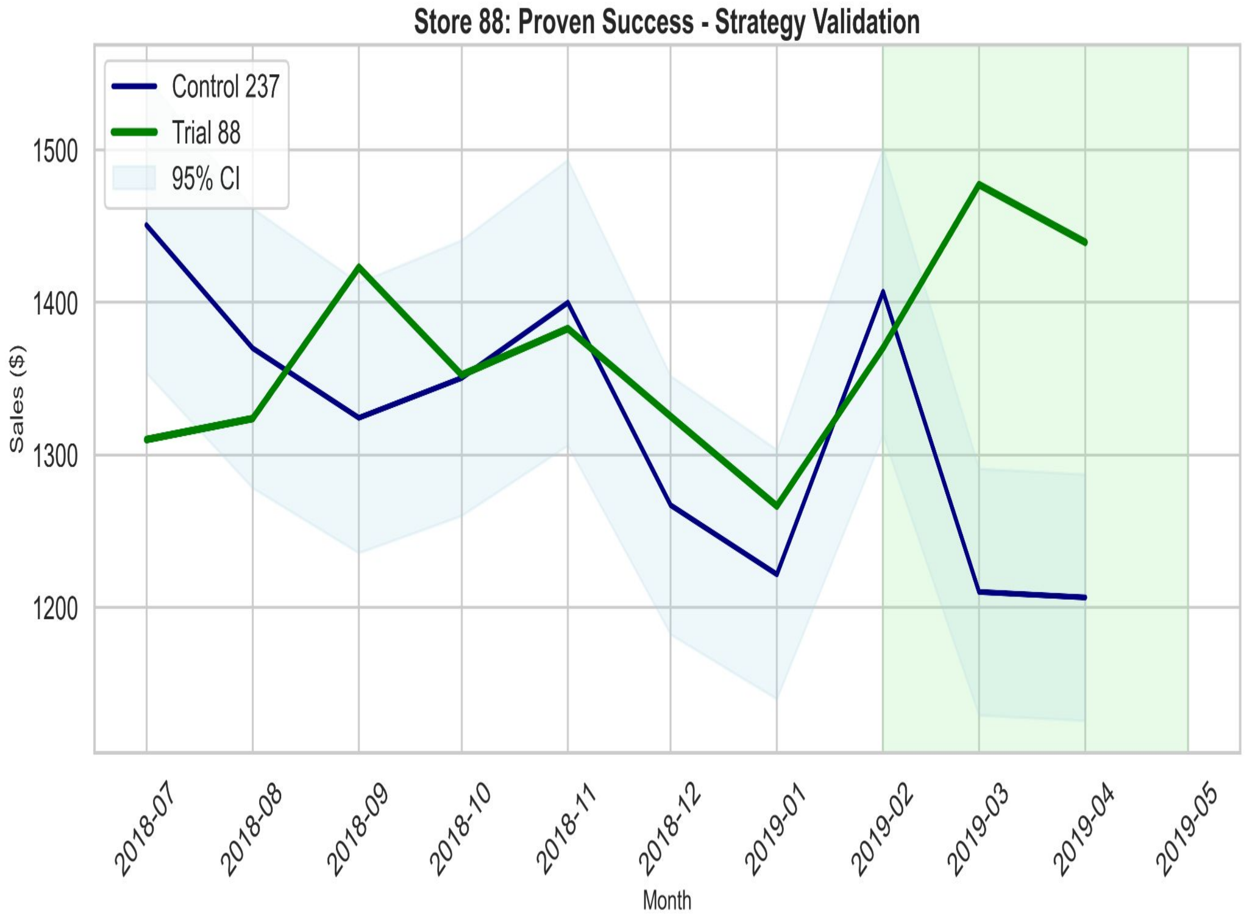
Statistically Significant Uplift

Store 77 outperformed Control Store 233 significantly during the trial period.

- **March T-Value:** 7.34 (Critical: 1.89)
- **April T-Value:** 12.48 (Critical: 1.89)

> *"Sales exceeded the 95% confidence interval for two consecutive months."*

TRIAL PERFORMANCE: STORE 88 (SUCCESS)



Key Takeaway

Store 88 mirrored the success of Store 77, showing clear divergence from its control (Store 237).

The trial strategy (merchandising/layout changes) is effective in driving sales for our target segment.

The consistency between Store 77 and Store 88 suggests the results are replicable and not an anomaly.

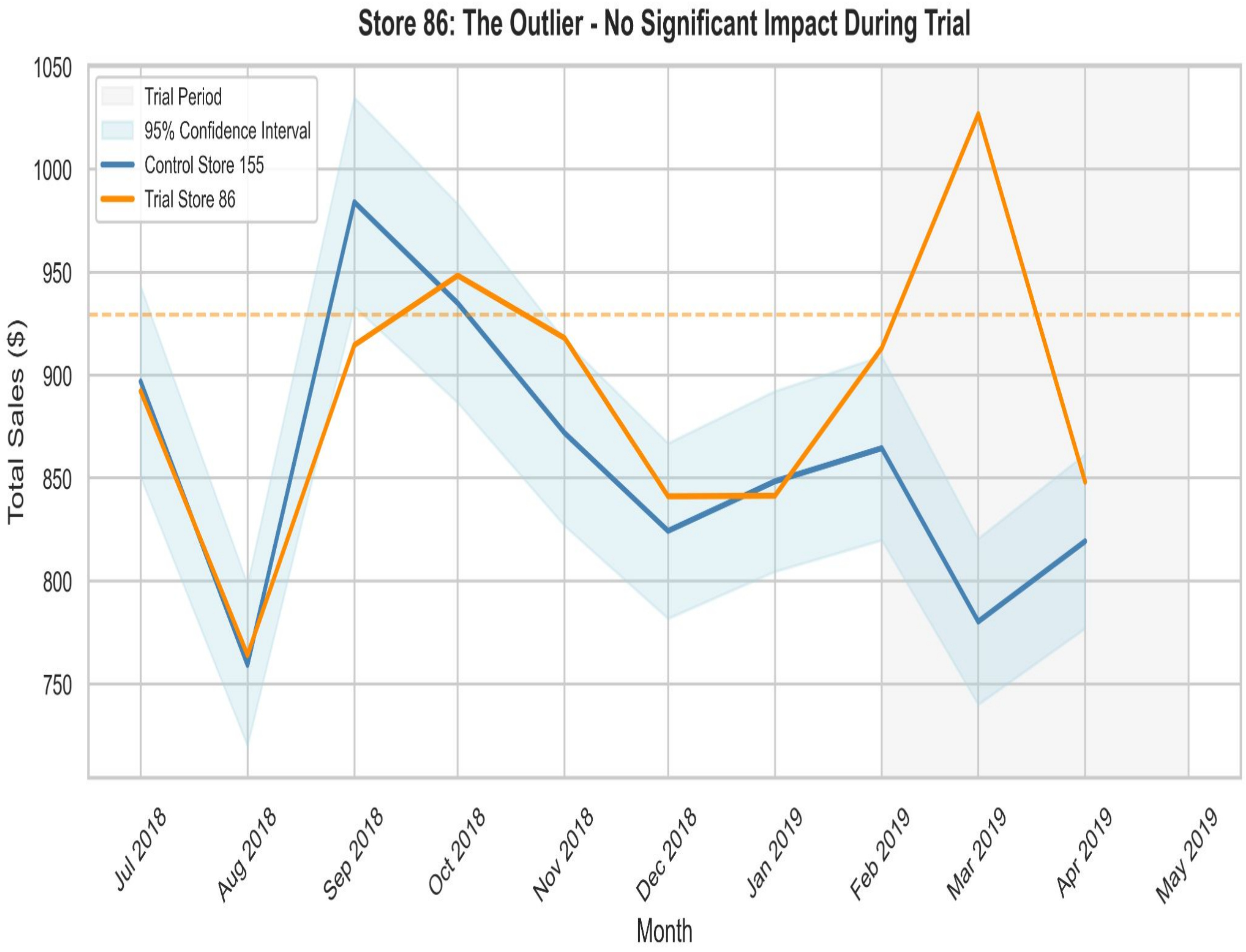
TRIAL PERFORMANCE: STORE 86 (NO IMPACT)

The Outlier: Store 86
Unlike the other trial locations, Store 86 showed **no significant difference** compared to Control Store 155.

Sales remained strictly within the 95% confidence interval throughout the trial period.

Possible Causes:

- Implementation failure?
- Stock availability issues?
- Competitor activity in the local area?



RECOMMENDATIONS & NEXT STEPS

Roll Out

Expand the trial strategy to all stores resembling Store 77 and 88, focusing on regions with high density of Young Singles/Couples.

Investigate

Conduct a root-cause analysis on Store 86. Do not roll out to similar profiles until the failure is understood.

Merchandise

Prioritize shelf space for **Tyrrells** and **Twisties**. Avoid deep discounts; focus on premium availability.

Thank You

Questions?

Quantium Analytics Team