

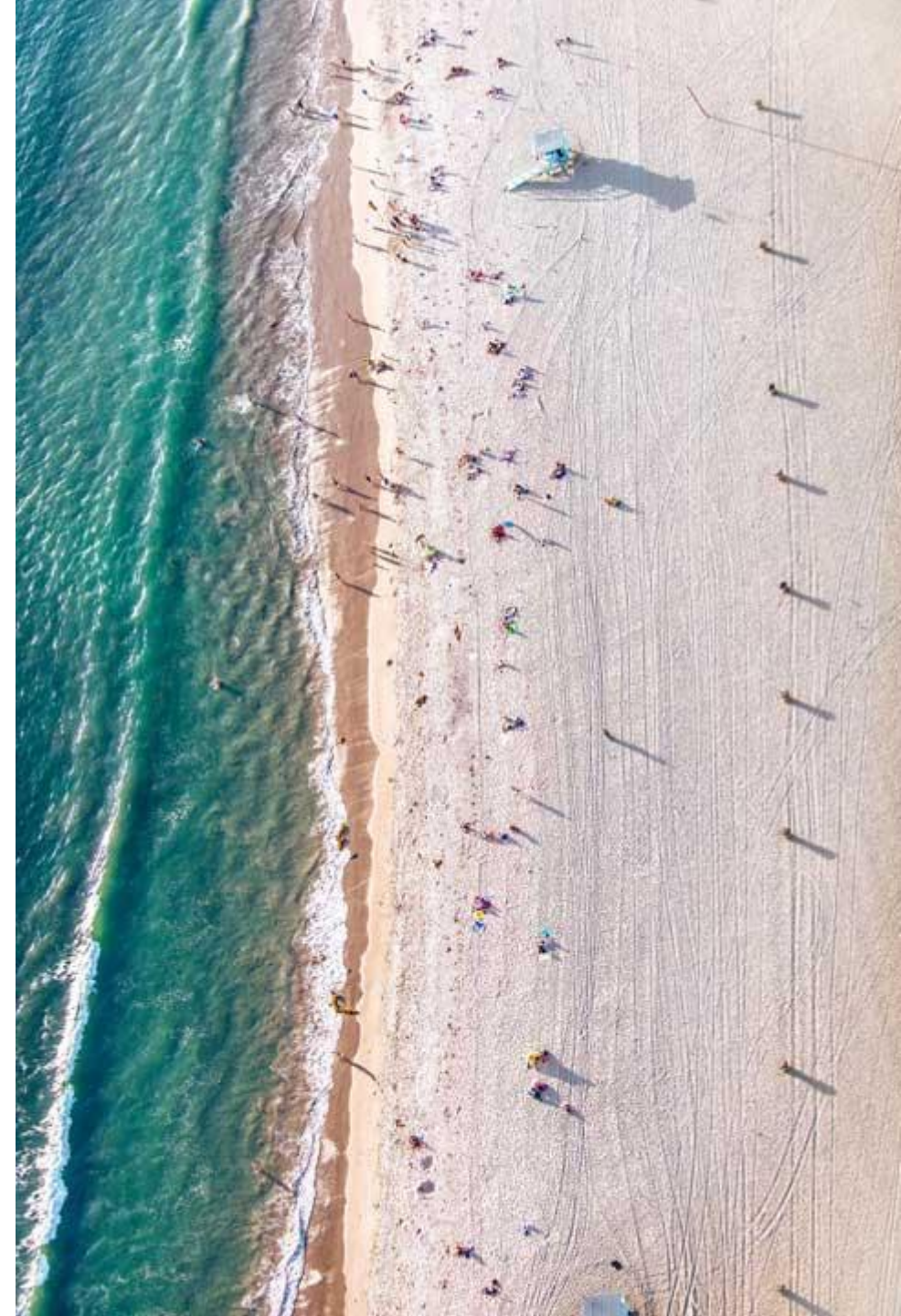
June 2020

Category Review: Chips Retail Analytics / June 2020

Retail Analytics



Classification: Confidential



Our 17 year history assures best practice in privacy, security and the ethical use of data

We all have a responsibility to use data for good

Privacy

- We have built our business based on privacy by design principles for the past 17 years
- Quantum has strict protocols around the receipt and storage of personal information
- All information is de-identified using an irreversible tokenisation process with no ability to re-identify individuals.

Security

- We are ISO27001 certified - internationally recognised for our ability to uphold best practice standards across information security
- We use 'bank grade' security to store and process our data
- Comply with 200+ security requirements from NAB, Woolworths and other data partners
- All partner data is held in separate restricted environments
- All access to partner data is limited to essential staff only
- Security environment and processes regularly audited by our data partners.

Ethical use of data

Applies to all facets of our work, from the initiatives we take on, the information we use and how our solutions impact individuals, organisations and society.

Quantum believes in using data for progress, with great care and responsibility. As such please respect the commercial in confidence nature of this document.

Executive summary

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Task 1

- Young Singles/Couples - Mainstream: largest customer base and highest price per pack
- Older Singles/Couples: strong overall sales across segments
- New Families: lowest contribution in spending and volume

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Task 2

- Control stores selected using similarity in total sales and customer count
- Best match for each trial store:
 - Store 77 → 233
 - Store 86 → 229
 - Store 88 → 188
- Statistically significant improvement found only in Store 88 ($p = 0.0002$)

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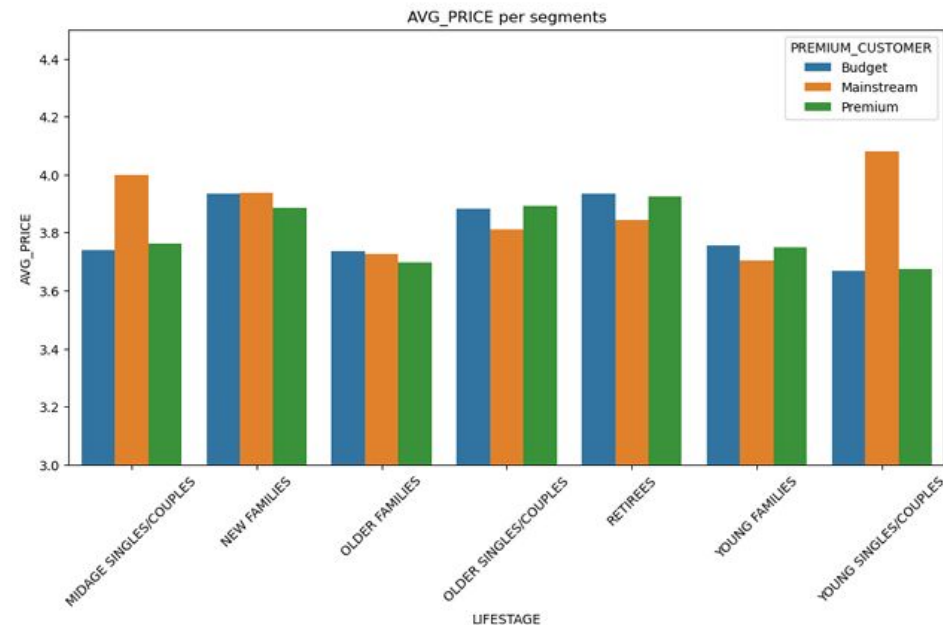
Category : Chips

Overview:

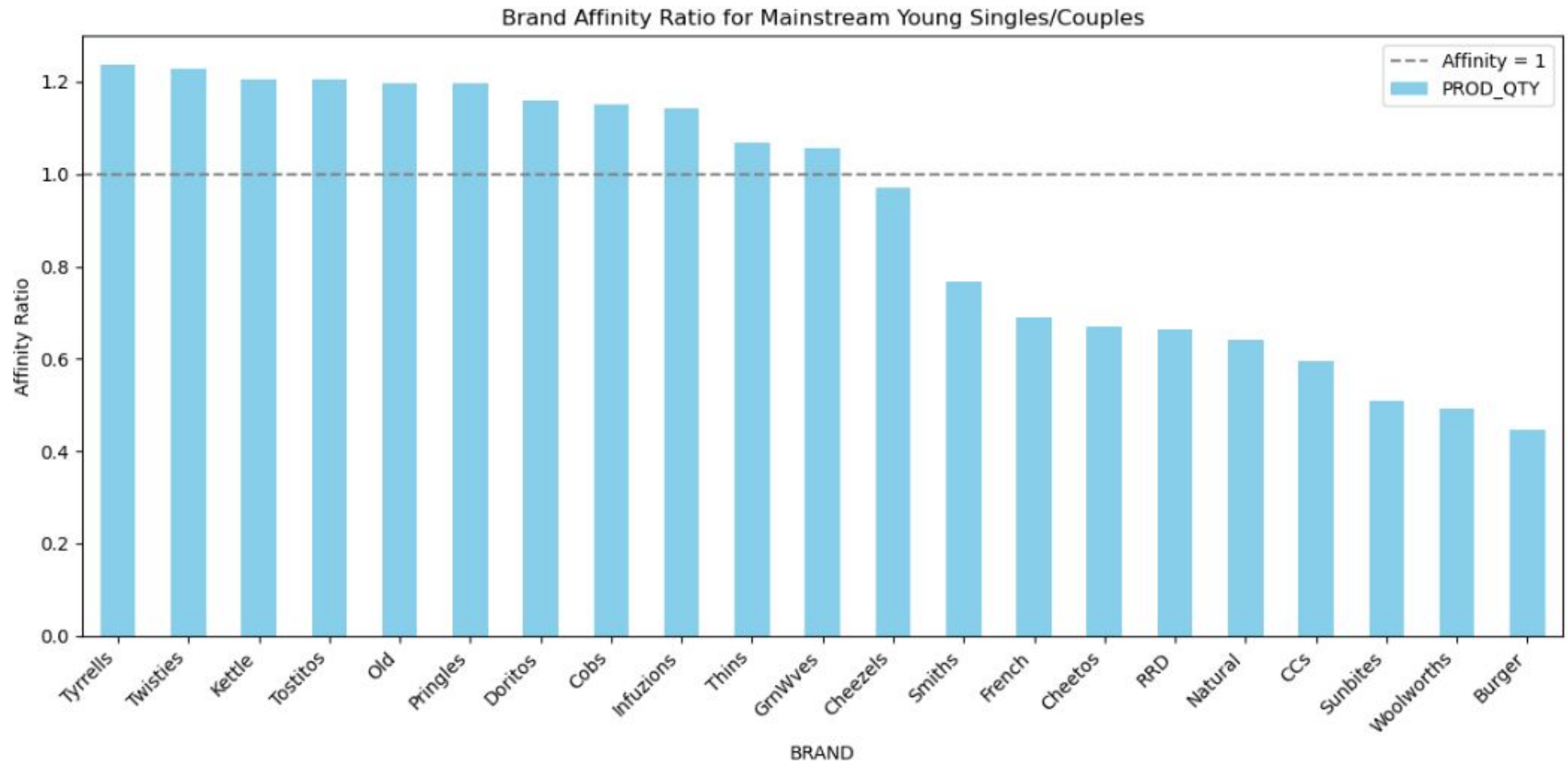
- Customer analysis showed varying preferences by life stage and segment
- High engagement from mainstream young couples; opportunity to target other groups more effectively
- Pricing and pack size influence average basket value significantly

- Affluence (wealth level) strongly correlates with premium chip purchases
- High-affluence segments (Older Couples, Midlife Families) are more likely to buy premium brands and larger pack sizes
- Lower-affluence groups (New Families, Young Singles) show preference for mainstream or budget offerings
- Pricing sensitivity is evident in average unit price differences by segment

Visual:



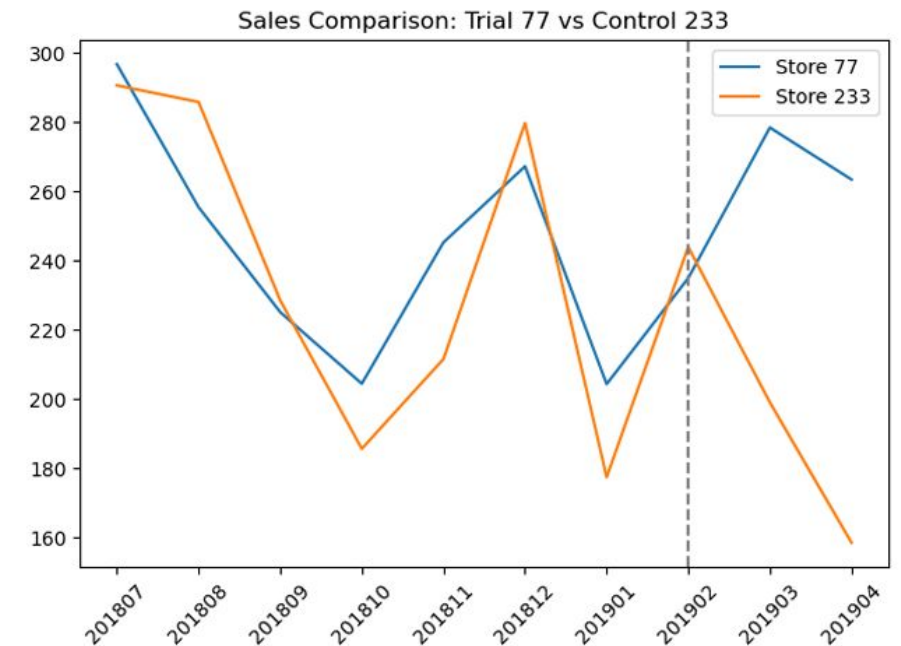
- *Young Singles/Couples - Mainstream* show high affinity for Tyrrells, Twisties, Kettle, Tostitos
- Least preferred brands: CCs, Sunbites, Woolworths, Burger



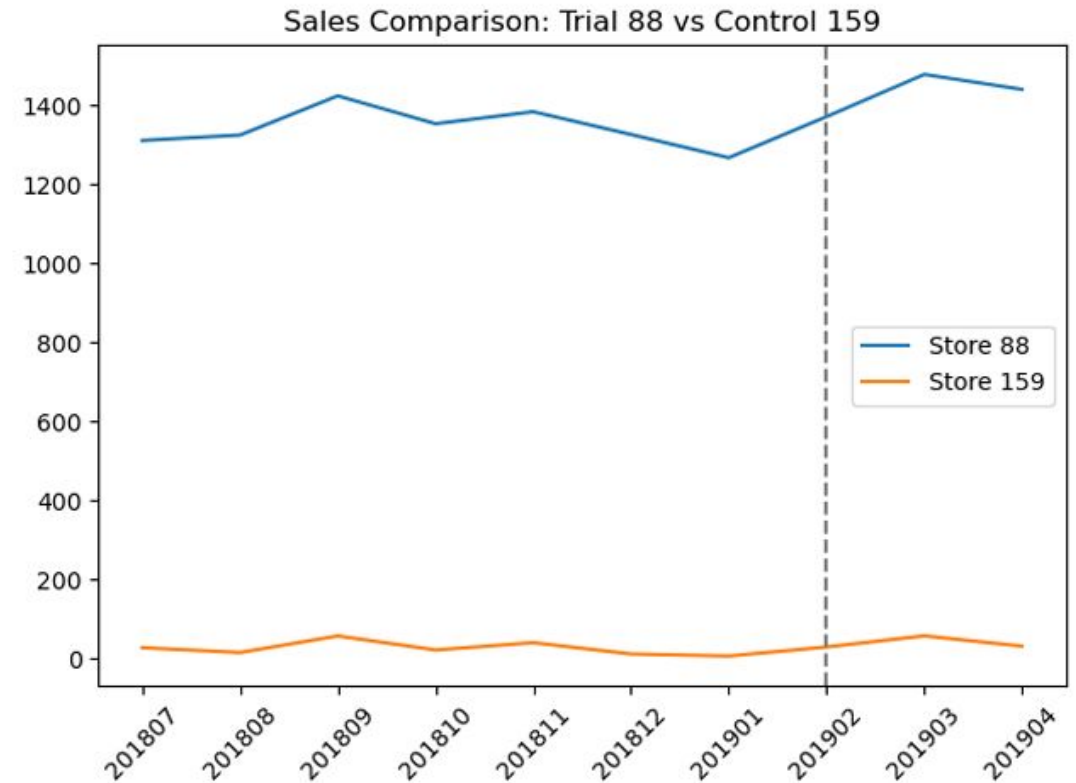
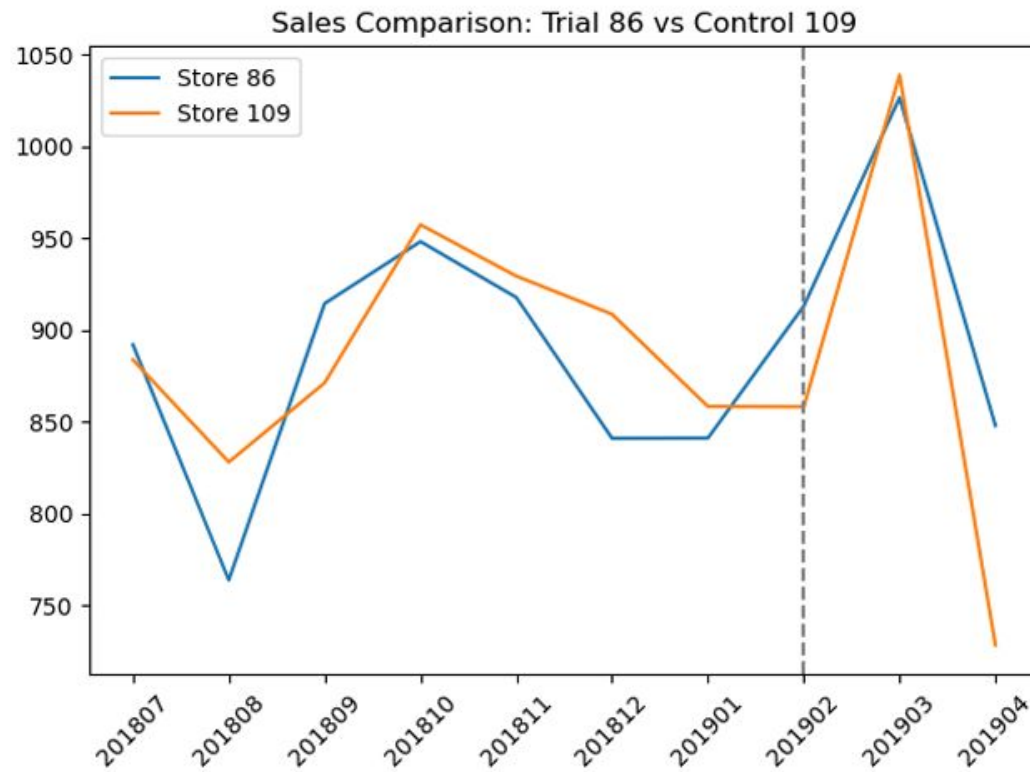
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Trial store performance

- Metrics used: total sales, number of customers
- Similarity measured using: Pearson correlation, normalized magnitude distance
- Final scores used to select closest match per trial store:
 - Store 77 → 233
 - Store 86 → 229
 - Store 88 → 188



- **Store 77 vs 233:** $p = 0.1261$ (Not significant)
- **Store 86 vs 229:** $p = 0.6376$ (Not significant)
- **Store 88 vs 188:** $p = 0.0002$ (Statistically significant)





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