May 2021

Category review: Chips

Retail Analytics

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

Privacy

- We have built our business based on privacy by design principles for the past 17 years
- Quantium 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.

We all have a responsibility to use data for good

Quantium 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

01 Task 1 **Category**

- Over the year, transactions increase dramatically in the lead-up to Christmas. Suggests optimal time for promotions during mid-December.
- Kettle is the most popular brand of chips, with 175g the most popular packet size.
- *Highest paying segments are:*
  - Older Families with Budget Premiums
  - Young Singles/Couples with Mainstream Premiums
  - Retirees with Mainstream Premiums

02 Task 2 **Experimentation & Uplift Testing (Trial Store Performance)**

- Trial Stores 77 and 88 saw significant increases in sales and customers in two of the three trial months.
- Store 86 saw significant increases in both sales and customers during only one trial month.
- Overall, both sales and customers had significant increases in sales during the trial.

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01

Category

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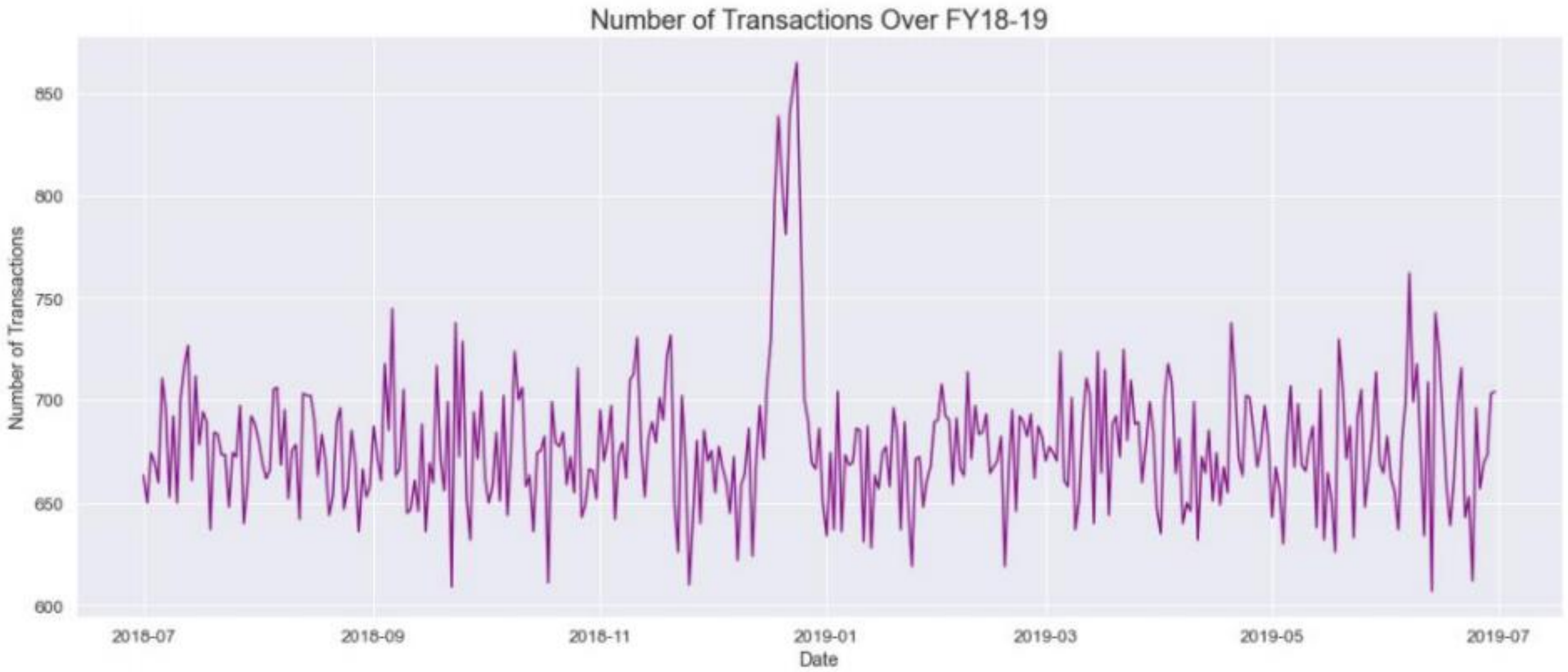
Overview: Transactions Over FY-18-19



- During ordinary time, the number of transactions for chips remain stabilized at between 640 to 750.
- However, during the lead up to the Christmas period, the number of transactions sharply increase to well above 800.
- This suggests the optimal time to run promotions on targeted items.

NOTE: *December 25th (Christmas Day) is not included in this graphic due to closure (public holiday).*

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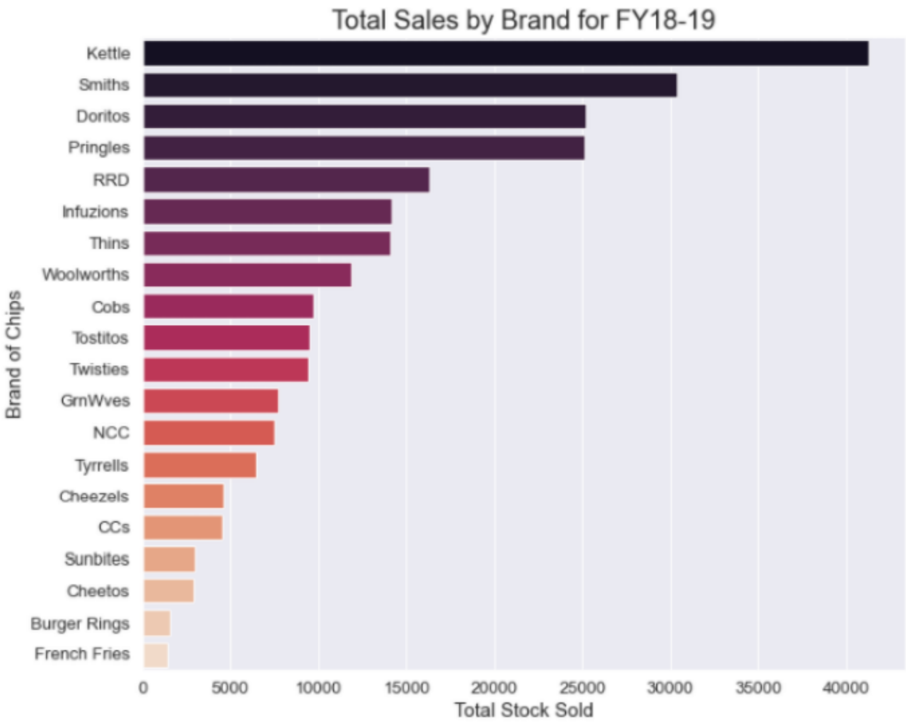
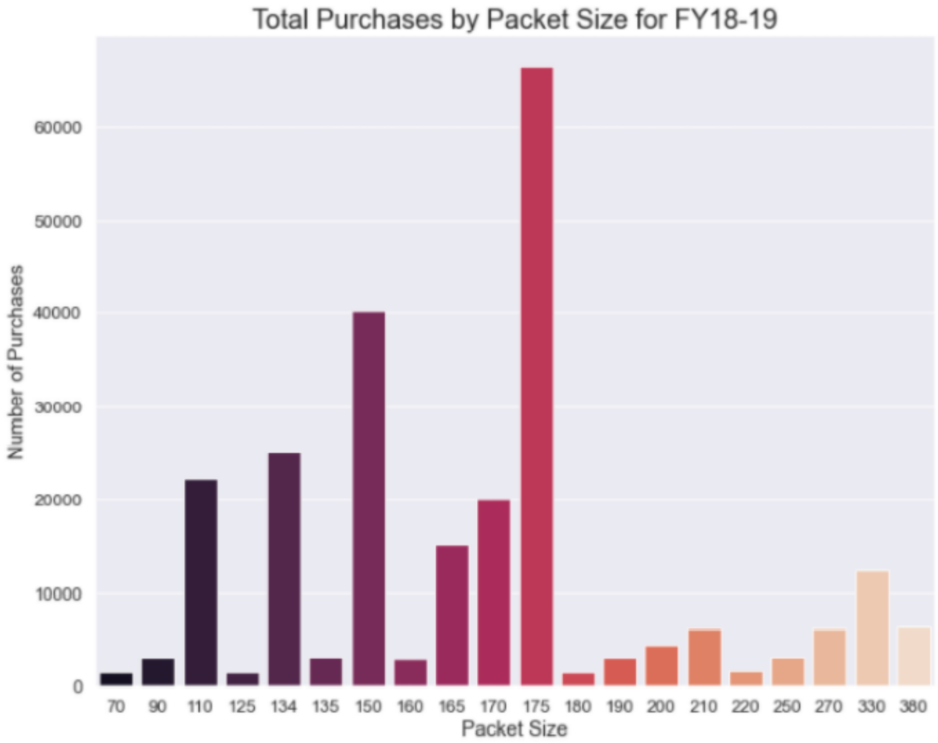
Overview: Top Selling Brands and Package Sizes



	Stock Sold
Kettle	41288
Smiths	30353
Doritos	25224
Pringles	25102
RRD	16321
Infuzions	14201
Thins	14075
Woolworths	11836
Cobs	9693
Tostitos	9471
Twisties	9454
GrnWves	7740
NCC	7469
Tyrrells	6442
Cheezels	4603
CCs	4551
Sunbites	3008
Cheetos	2927
Burger Rings	1564
French Fries	1418



- **Kettle** is the most popular brand of chips.
- The top selling packet size is **175g.**

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Affluence and its effect on consumer buying for the category of chips

Total Expenditure – Highest paying segments by Affluence:

- Older Families with ***Budget Premiums***
- Young Singles/Couples with ***Mainstream Premiums***
- Retirees with *Mainstream* ***Premiums***

Other Information:

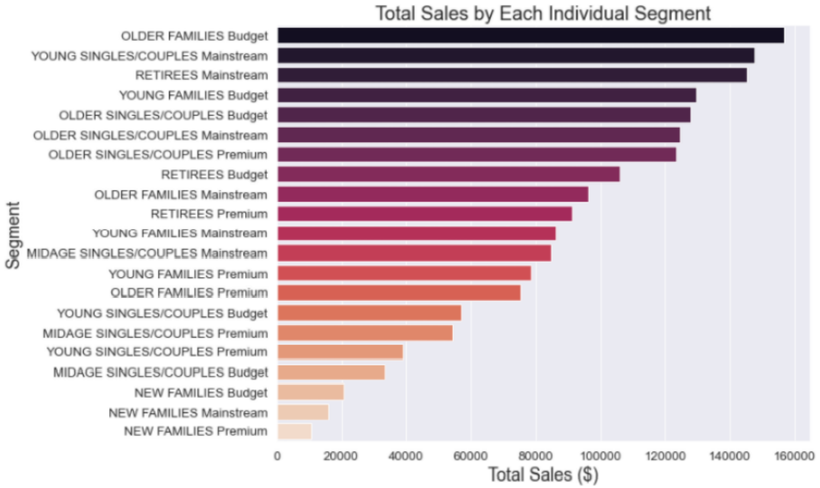
- Older and Young Families buy more units per transaction.
- Retirees and Older Singles/Couples have the highest unique customer counts.
- Retirees and New Families are willing to spend on more premium ranges of snacks as opposed to other affluence categories, as they have the highest average unit price.

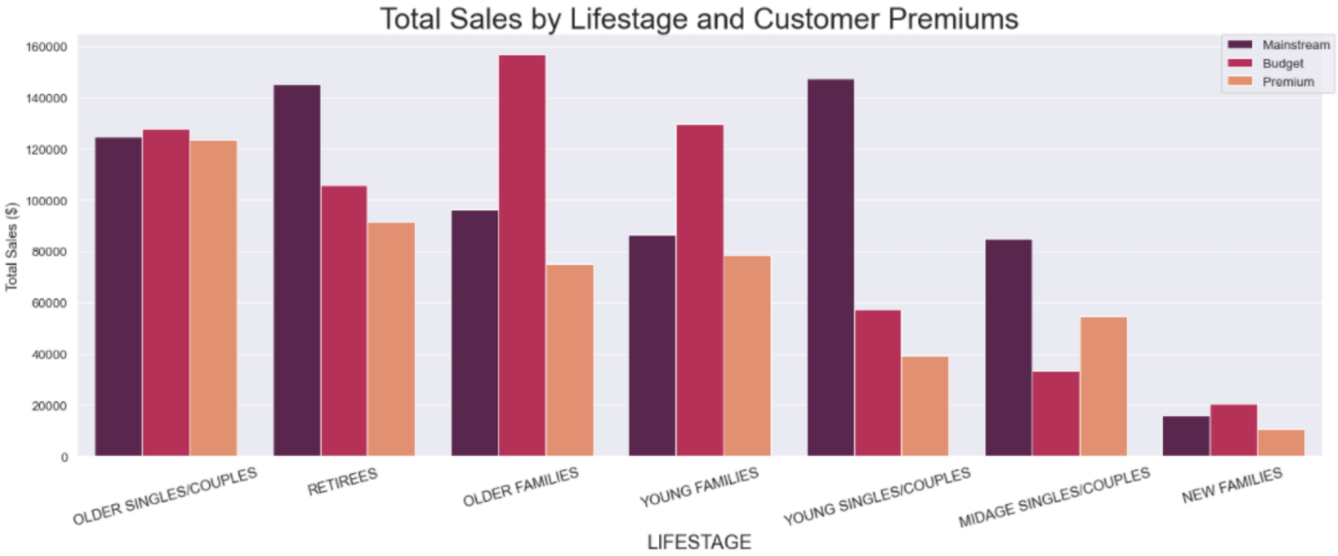
Recommendations:

Target segments which provide the most sales.

Catering to these segments will further increase sales. Suggest looking at their favourite brand of chips.

Visualizing the proportion of customers by affluence (customer premium) and life stage





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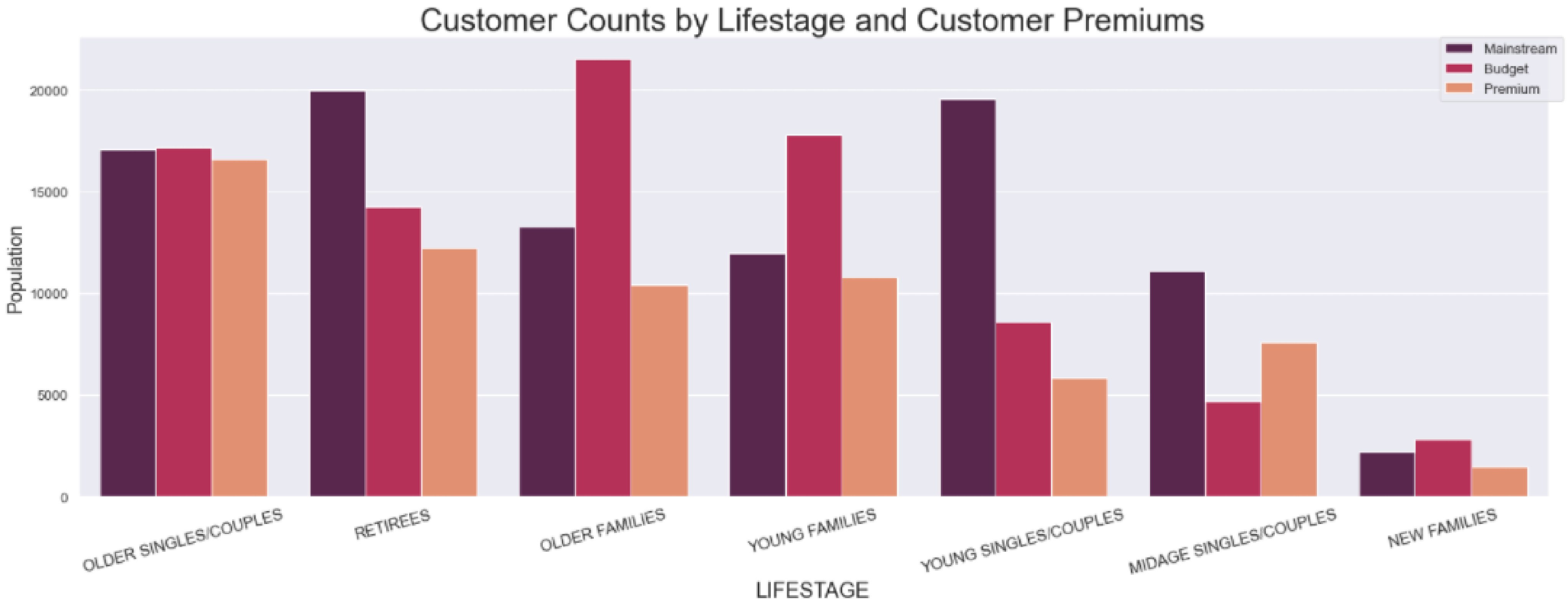
Visualizing the proportion of customers by affluence (customer premium) and life stage



We can see that **older families on budget premiums** and **retirees on mainstream premiums** buy chips more than any other segment, contributing to being top 3 total spenders.

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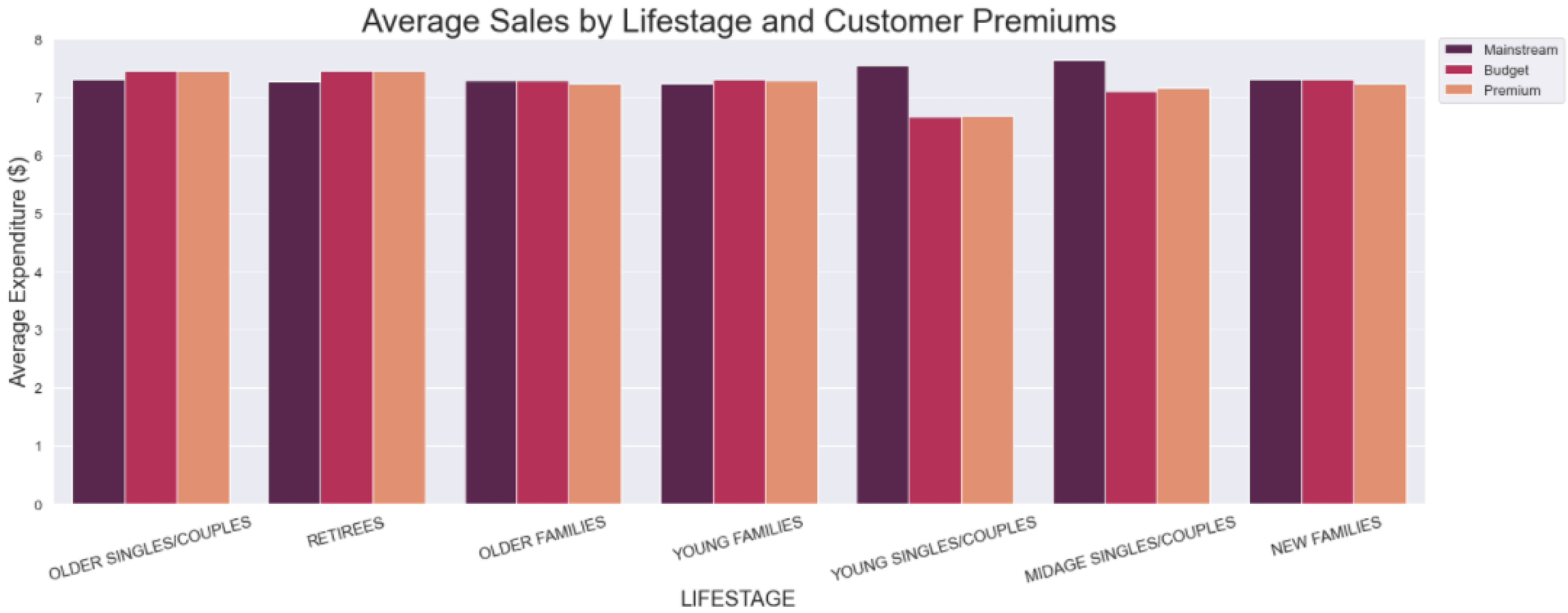
Visualizing the proportion of customers by affluence (customer premium) and life stage



Middle aged singles/couples and young singles/couples spend the most per transaction.

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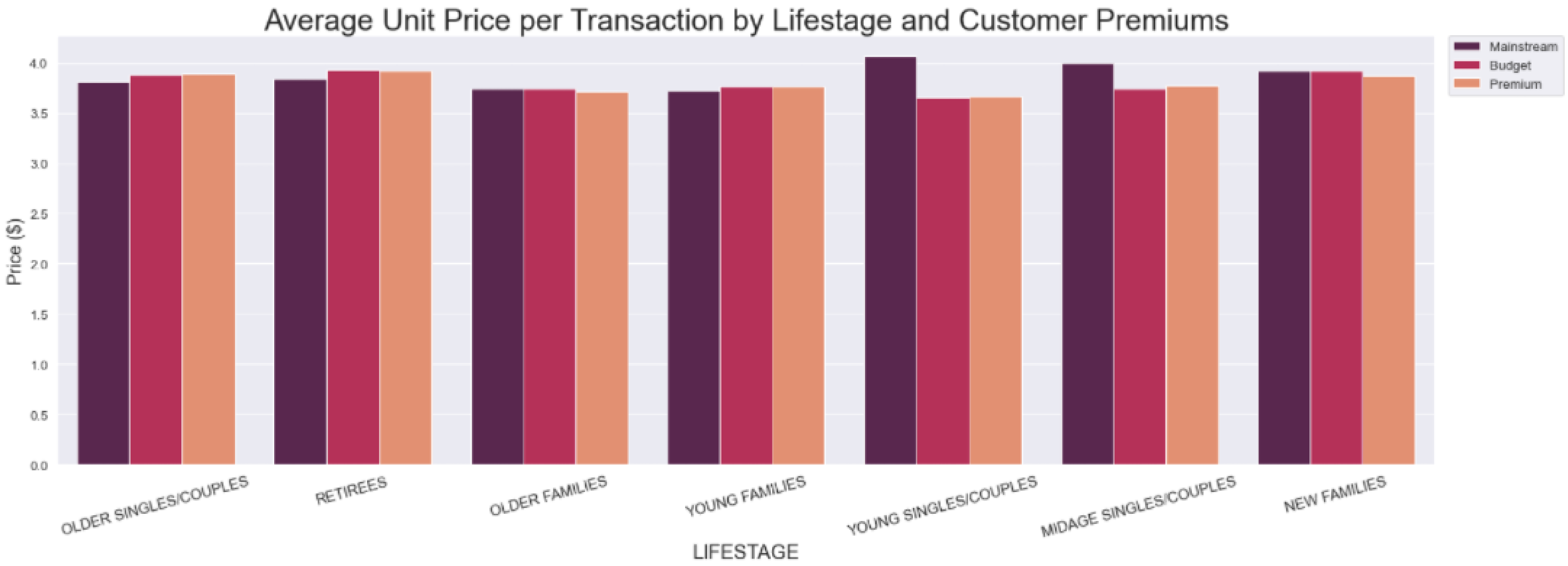
Visualizing the proportion of customers by affluence (customer premium) and life stage



Young & Midage Singles/Couples are more willing to pay more per packet of chips compared to their budget and premium couterparts.

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02

Trial store performance

Explanation of the control store vs other stores

Trial Store	Corresponding Control Store
77	233
86	155
88	237

Selection Criteria

The control stores were selected based off the following criteria:

- Total monthly sales
- Total monthly number of customers
- Average Quantity per transaction
- Average Unit Price per transaction

Method:

Selection of these stores based off these metrics was done via finding the closest Euclidean distance of each store’s performance vector over the months prior to the trial.

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Trial Store Performance – Total Sales

Results:

- Stores 77 and 88 show a significant increase in sales for majority of the trial.
- Store 86 only showed a significant increase in sales for the month of March, but did not maintain this performance on either the head of tail of the trial period.

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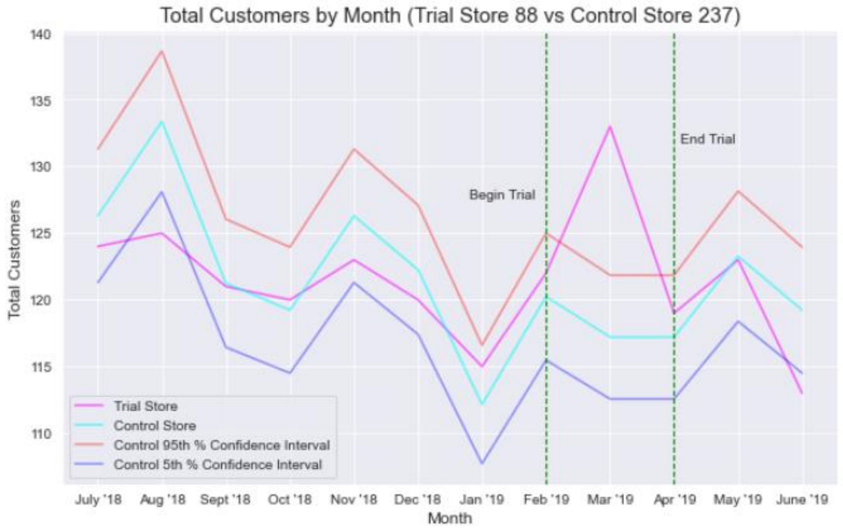
Trial Store Performance – Number of Customers

Results:

- For stores 77 and 86, the trial store is significantly different to its control store in the trial period, in terms of number of customers.

- However, for store 88, it is only significantly different for the month of March.



Recommendations

- Target segments which provide the most sales. These include:
  - *Older Families – Budget*
  - *Young Singles/Couples – Mainstream*
  - *Retirees – Mainstream*
- Cater to these segments via their favourite snacks:
  - Maintain stock levels for top brands
  - Targeted promotions – i.e. Multibuy specials/target advertisements
- Increase stock levels and promotions during December period
- Prioritize 175g packet size products when replenishing stock
- Maintain and run promotions on Kettle and 175g packet sized chips

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What's next?

- Check with Category Manager to discern whether any special offers within the trial store affected the decrease in sales during the trial period months, impacting our trial results.

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