

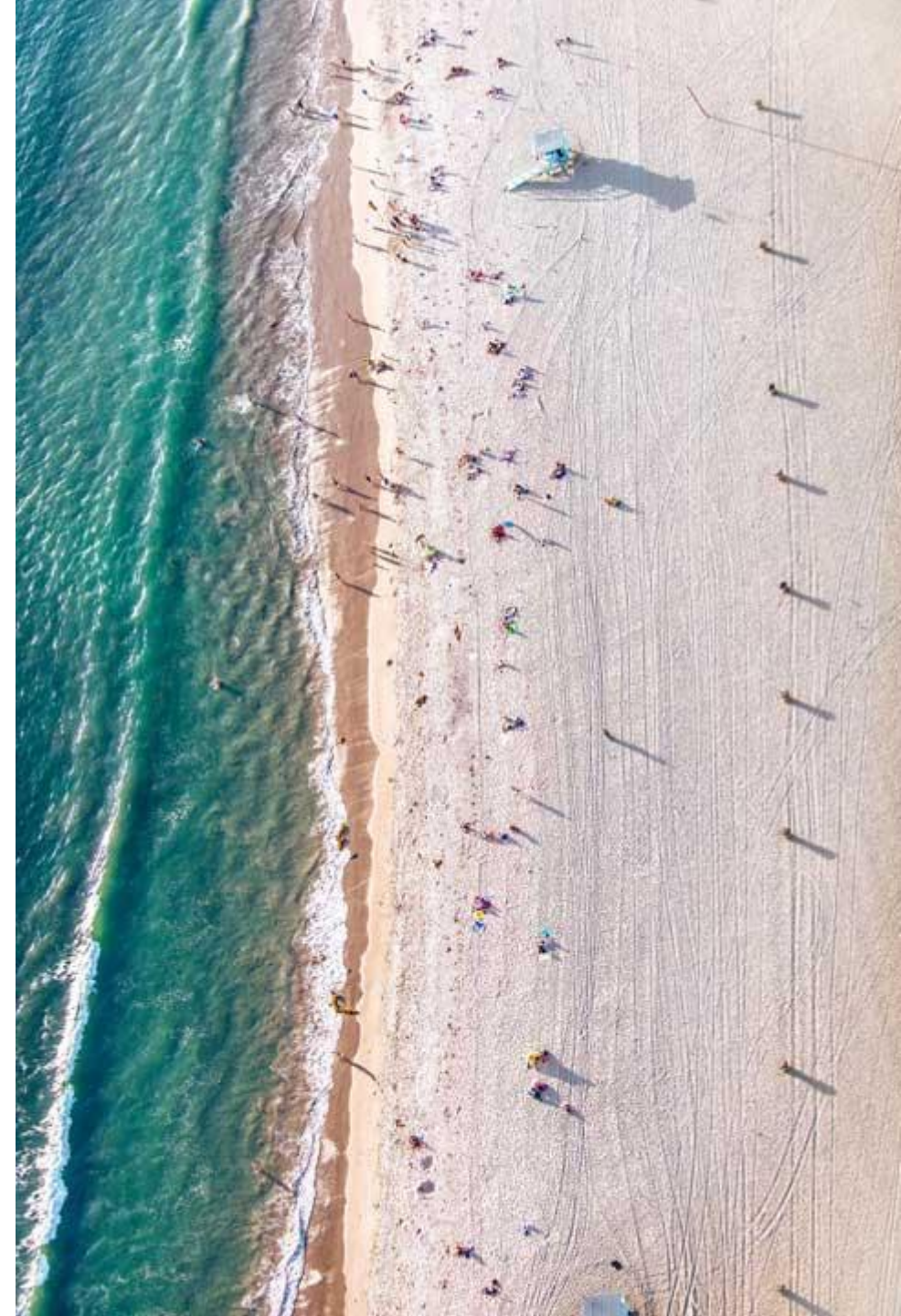
June 2020

Category review: Chips

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

Segment to target:

- Young Singles/Couples Mainstream

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Task 2

- Trial resulted in an increase in sales at some point within the trial period.
- Drivers of these sales vary from store to store.

01

Category



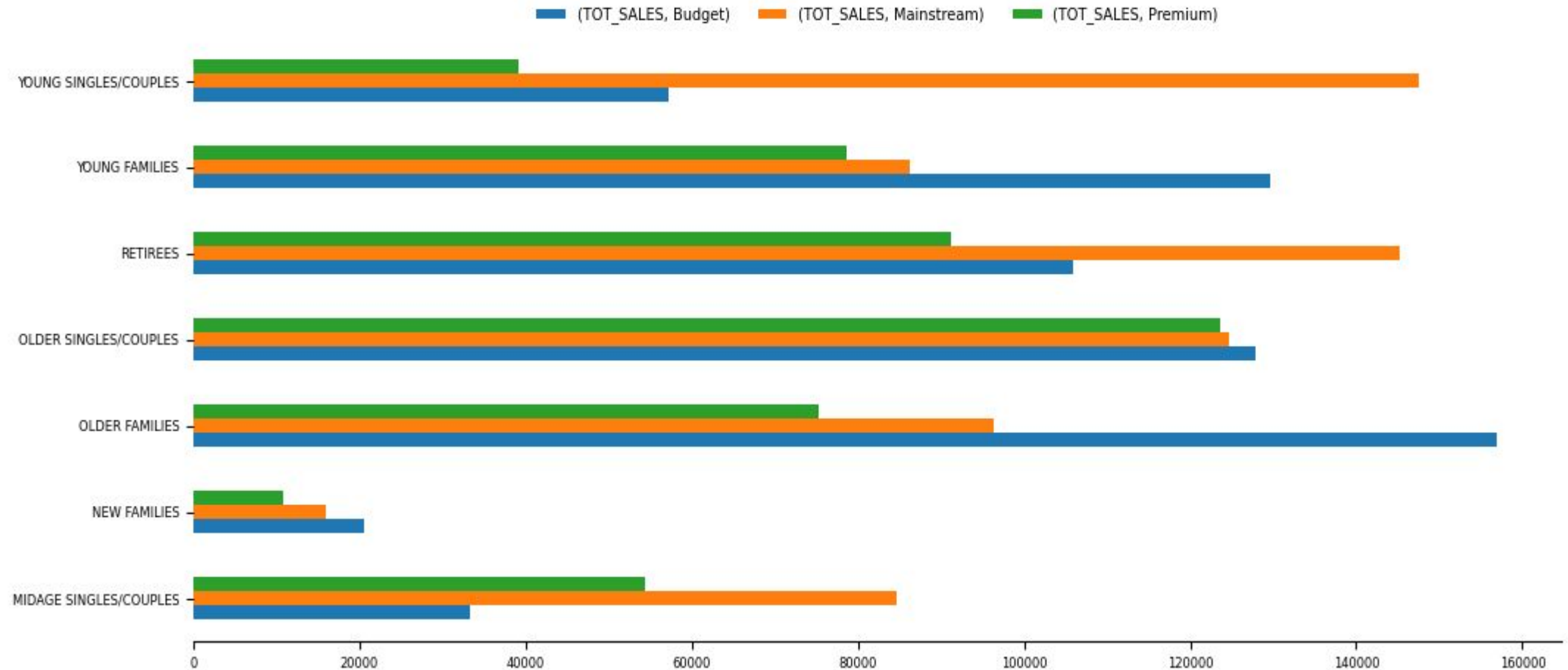
Overview of the target segment

- Boast the largest customer base.
- Willingness to spend more per chip packet
- 2nd Largest contributor to Total sales and average sales
- 3rd for number of repeat purchases per segment
- Decent quantity bought despite ranking higher in sales

Total sales

The total sales throughout the period amounted to \$1,805,177.7, with the target segment making up 8.175% of this at \$147,852 ranking at the 2nd highest contributor to sales.

Total sales

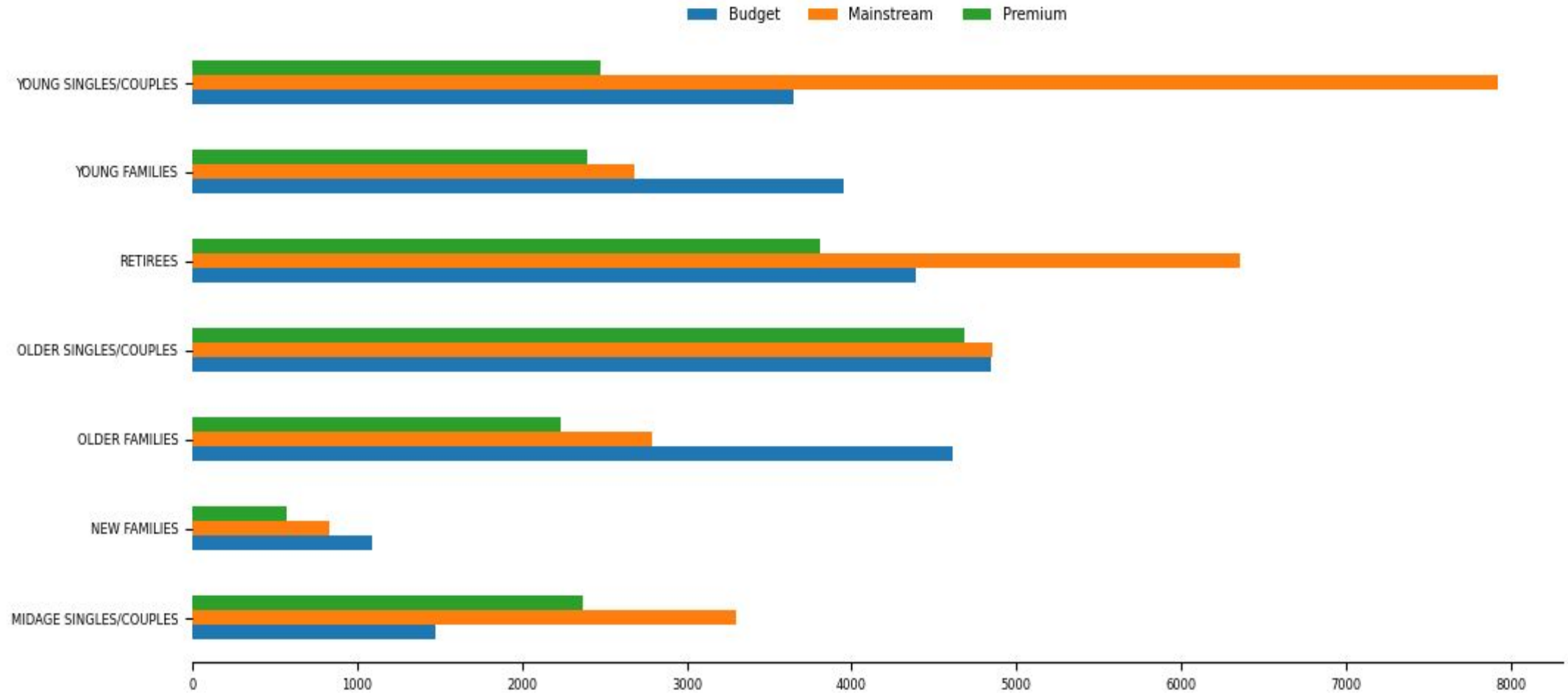


Customer composition

A major driver of these sales is the customer composition of the segment.

The segment constitutes the majority number of unique customers making up 11% of the customer base.

Unique Customers per segment (Top 10 segments)

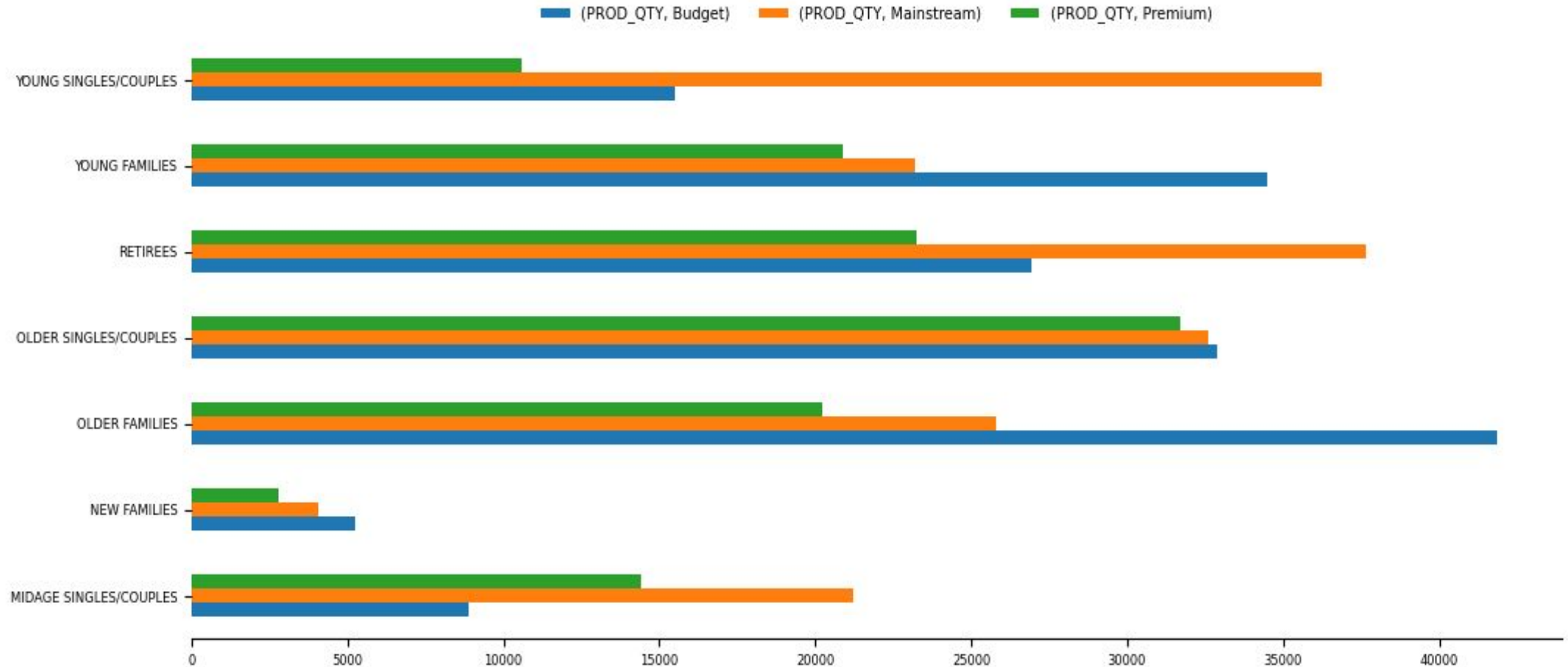


Product sold per segment

Another significant contributor to sales is the amount of product bought, ranking the 3rd highest.

This provides a first glimpse at the potential for growth given segments with a much less customer base are purchasing more product.

Quantity sold per segment

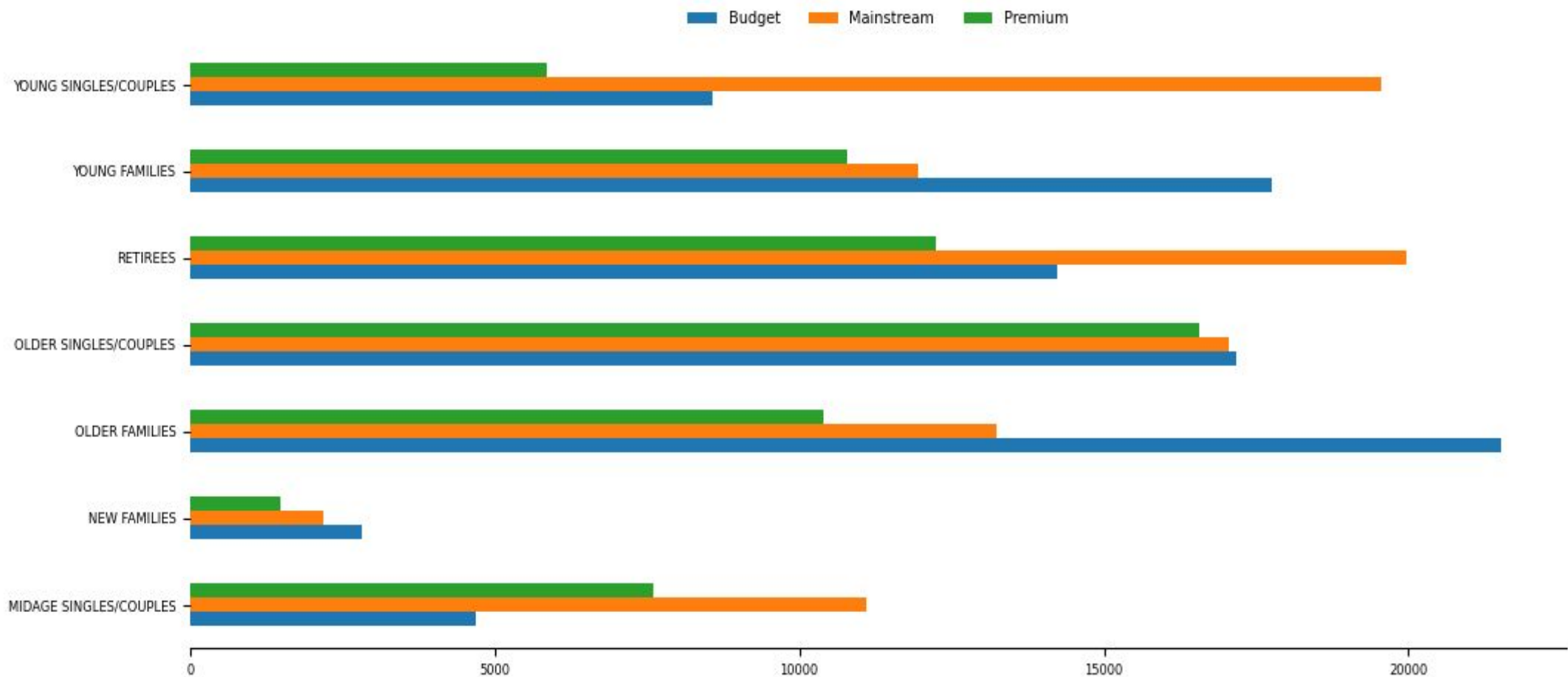


Total transactions per segment

A similar theme continues in the number of transactions carried out by each segment with our target ranking 3rd again.

There is an opportunity for growth here.

No. of transactions per customer base.



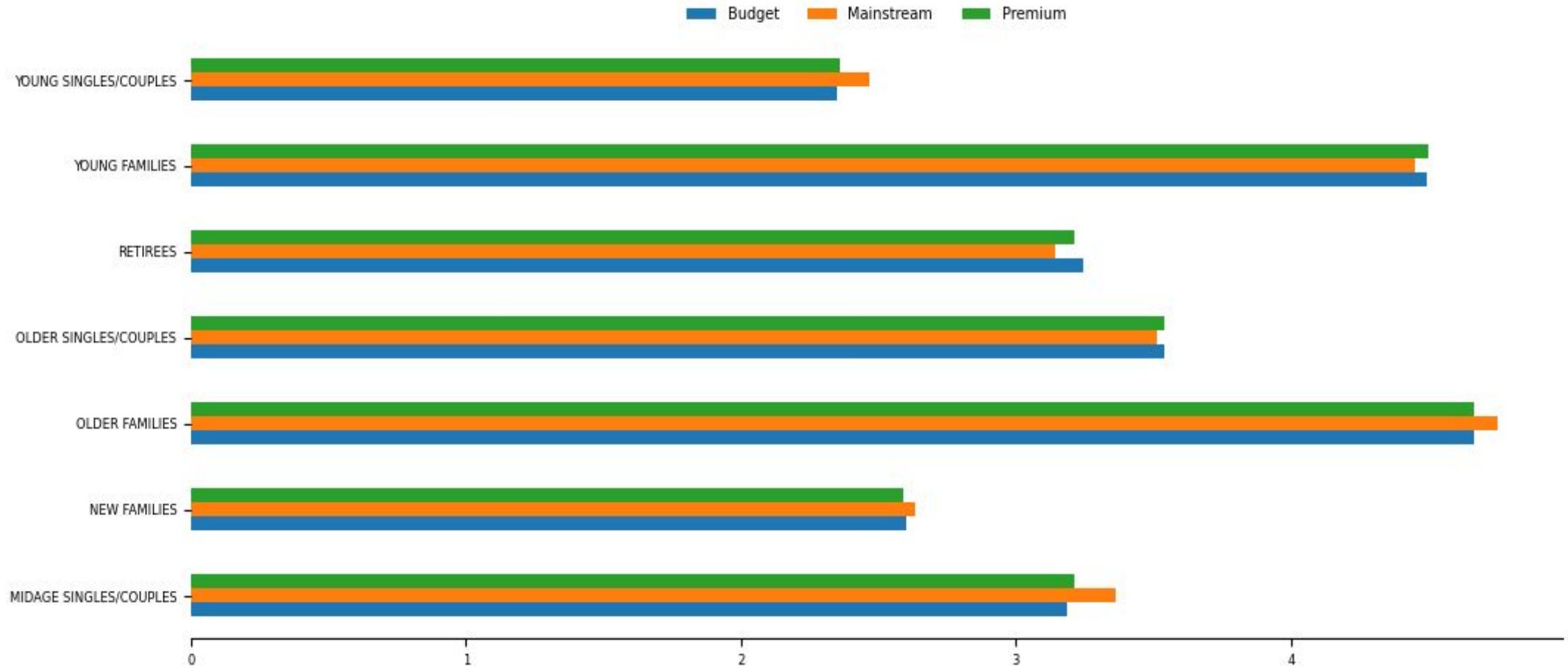
Repeat purchases per segment

This solidifies our point even further with.

Our segment lies 3rd least in repeat purchases per customer.

This is where majority room to improve lies and would potentially be a major contributor to an increase in sales.

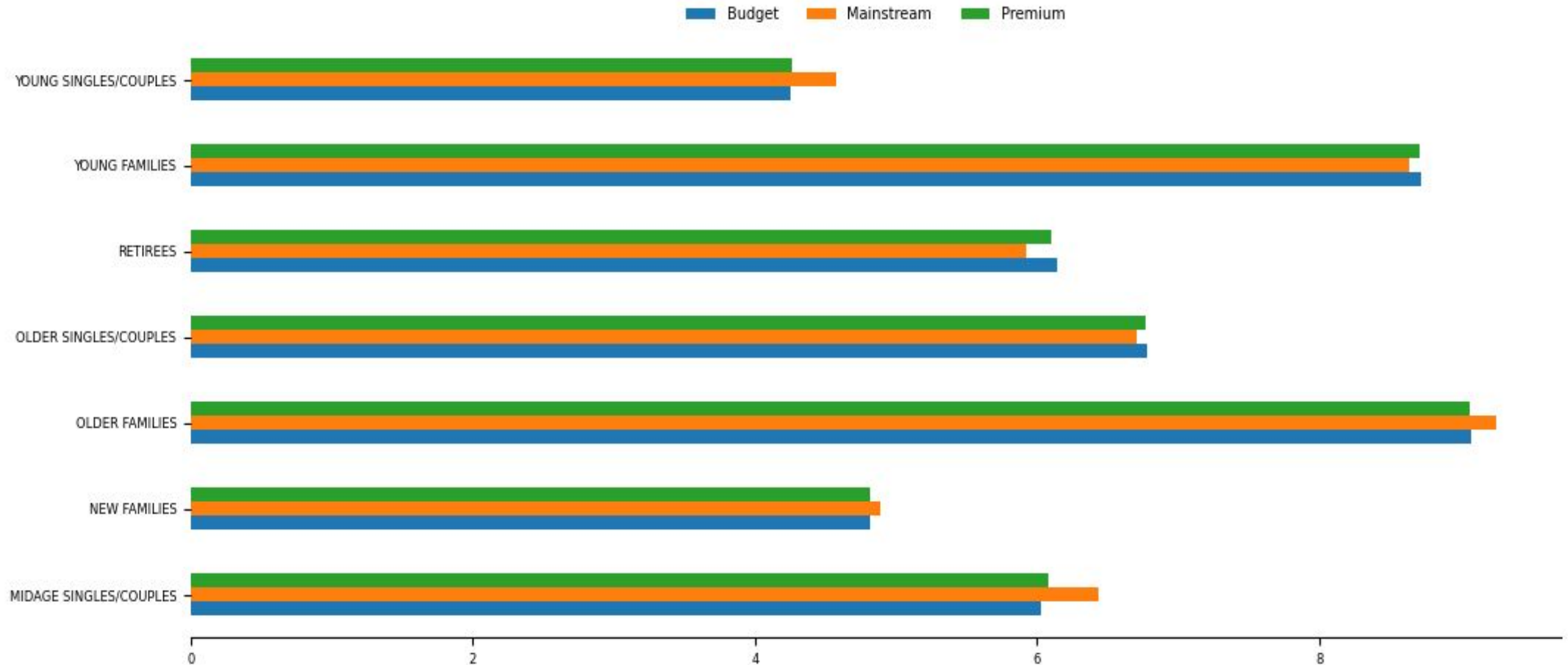
Average number of transactions per customer



Average chip units bought per segment

Quite similar to the average number of transactions per customer, our target segment ranks among the bottom three in chip packets bought.

Average units per customer segment

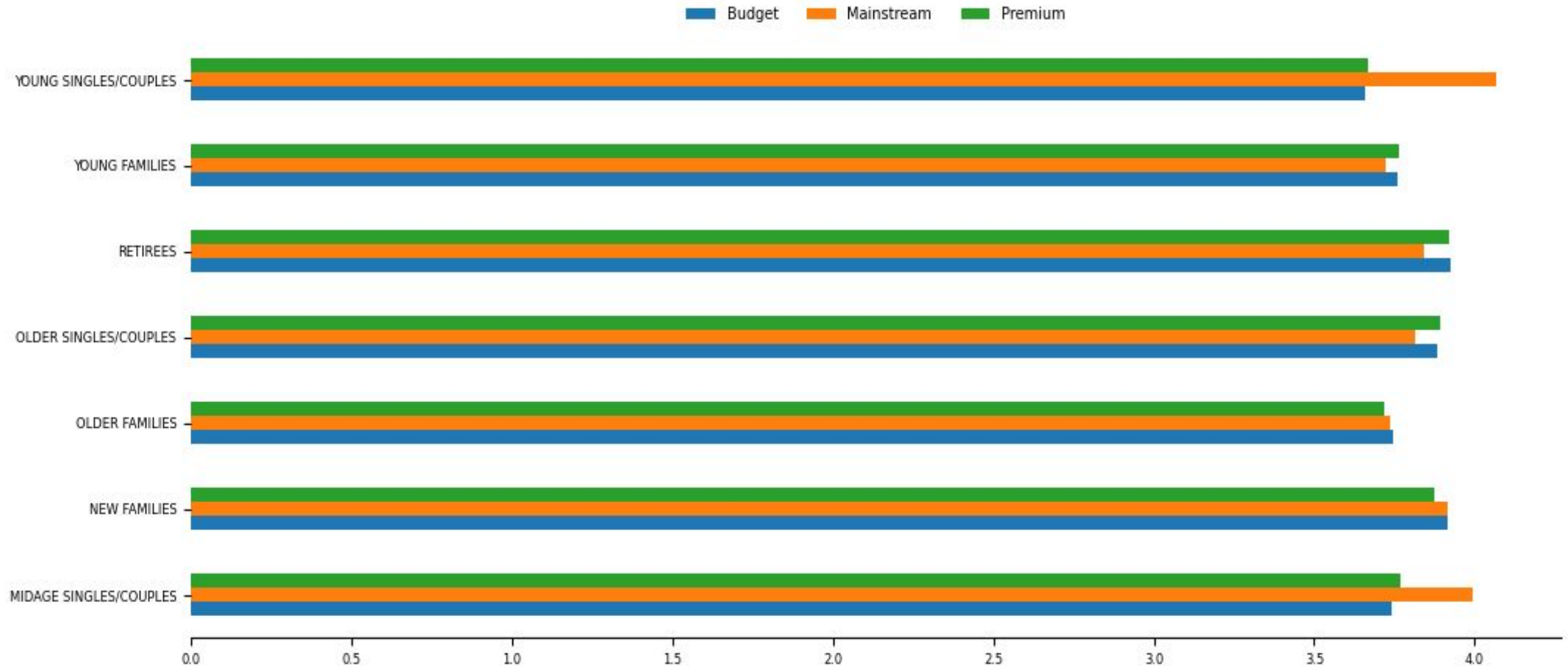


Average spend per chip unit bought

Despite all this, interesting to note is that the segment appears more than willing to spend more.

This is evident in them ranking the highest in the average spend per unit of chip bought signifying the willingness to spend more.

Average spend per unit



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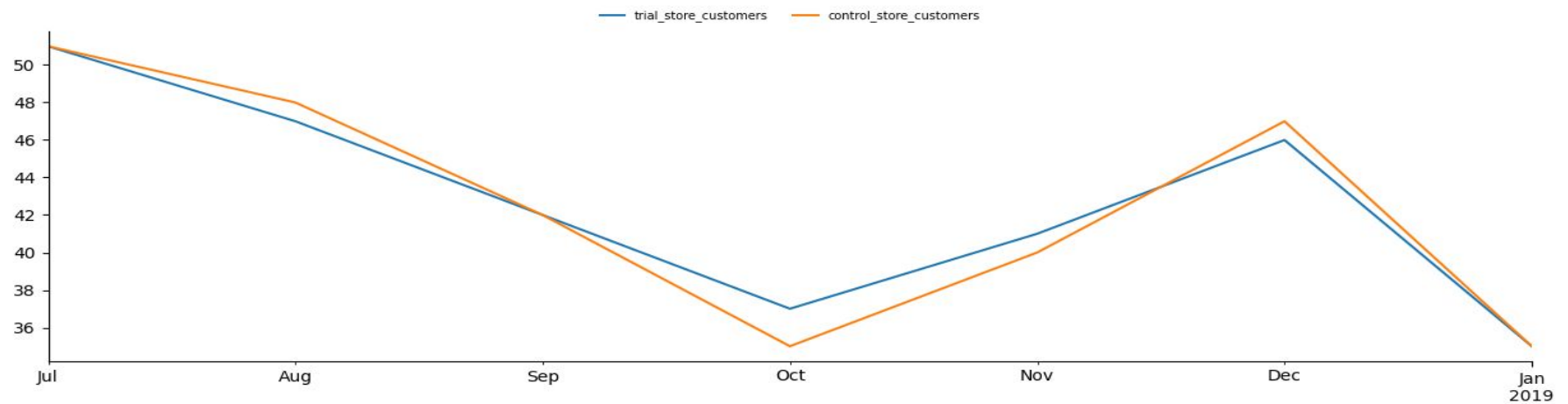
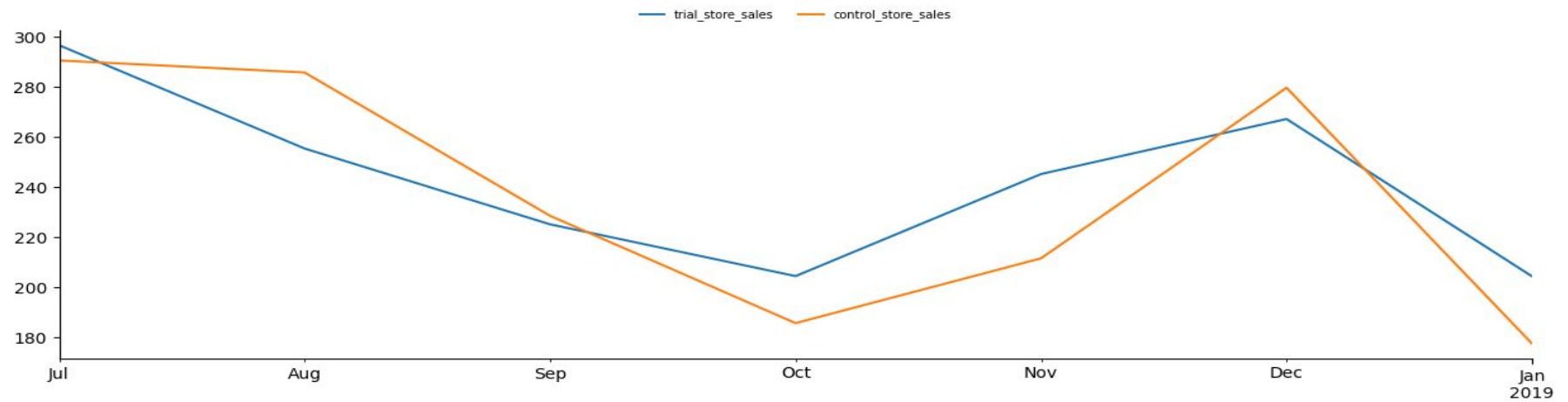
Trial store performance

Control store selection

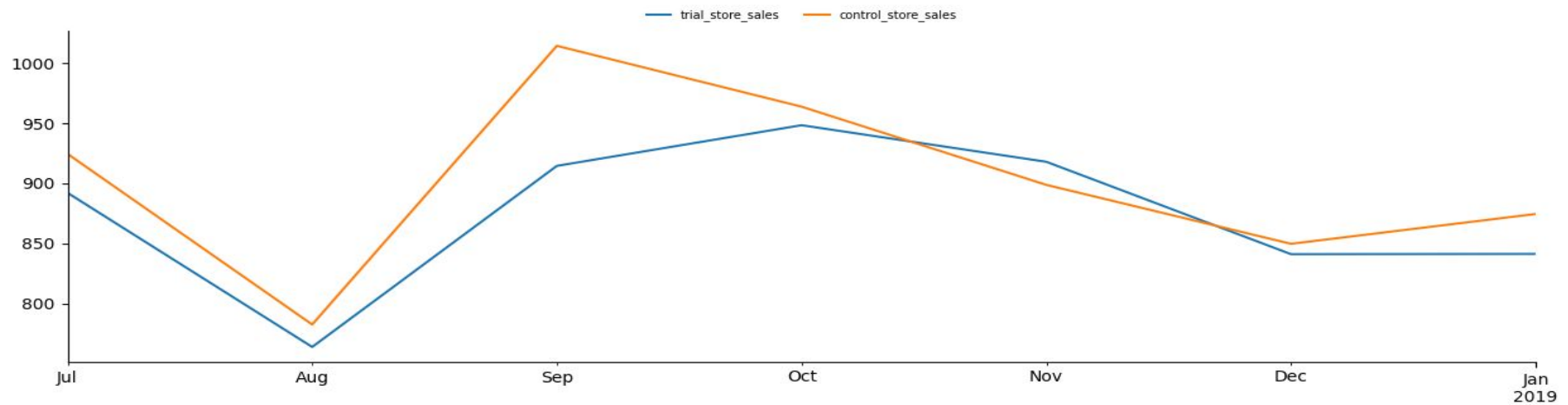
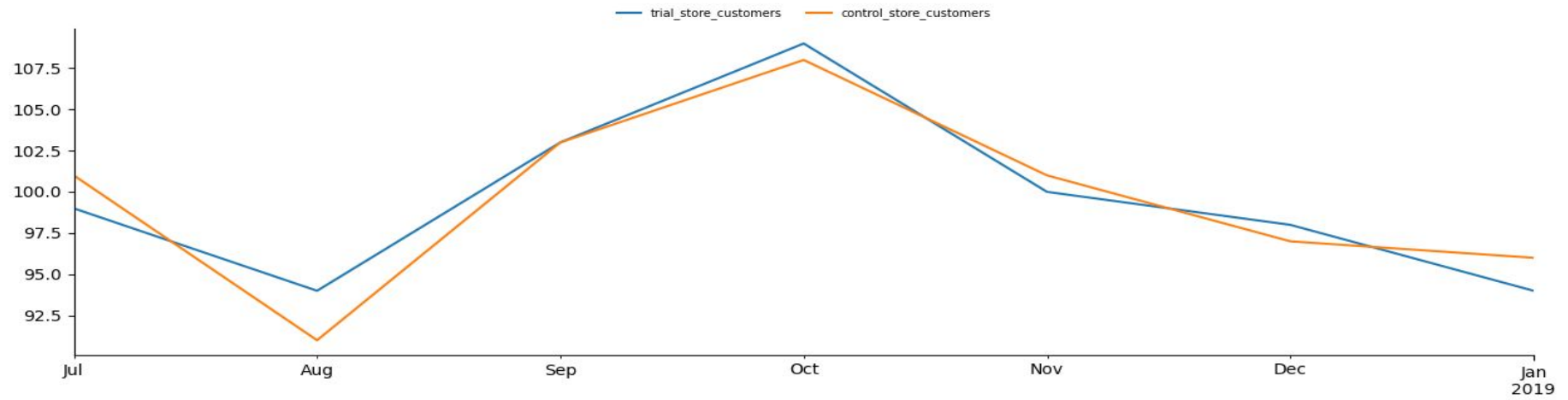
Control store selection was based on correlation between trial stores and the rest of the stores based on total sales and number of customers visiting the stores.

The visualizations of each store and it's corresponding control store follow:

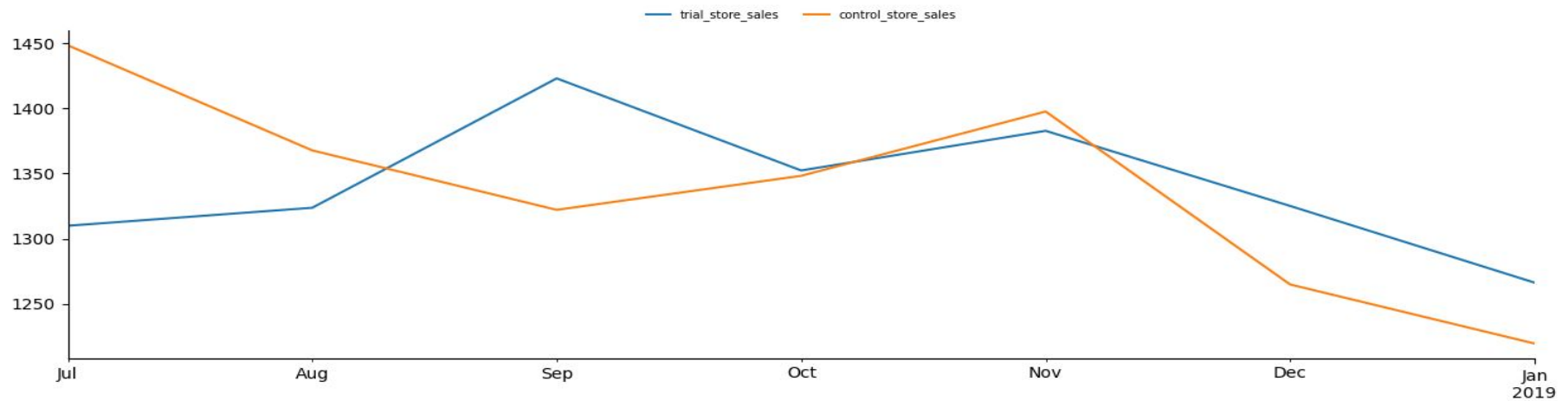
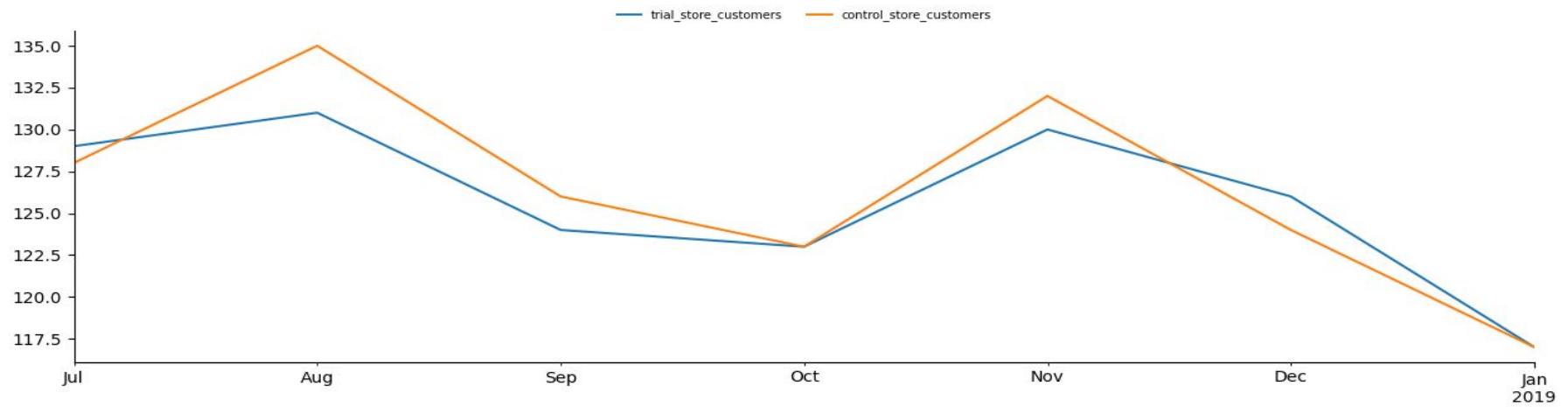
Store 77 and its corresponding control store 233



Store 86 and its corresponding control store 155



Store 88 and its corresponding control store 237



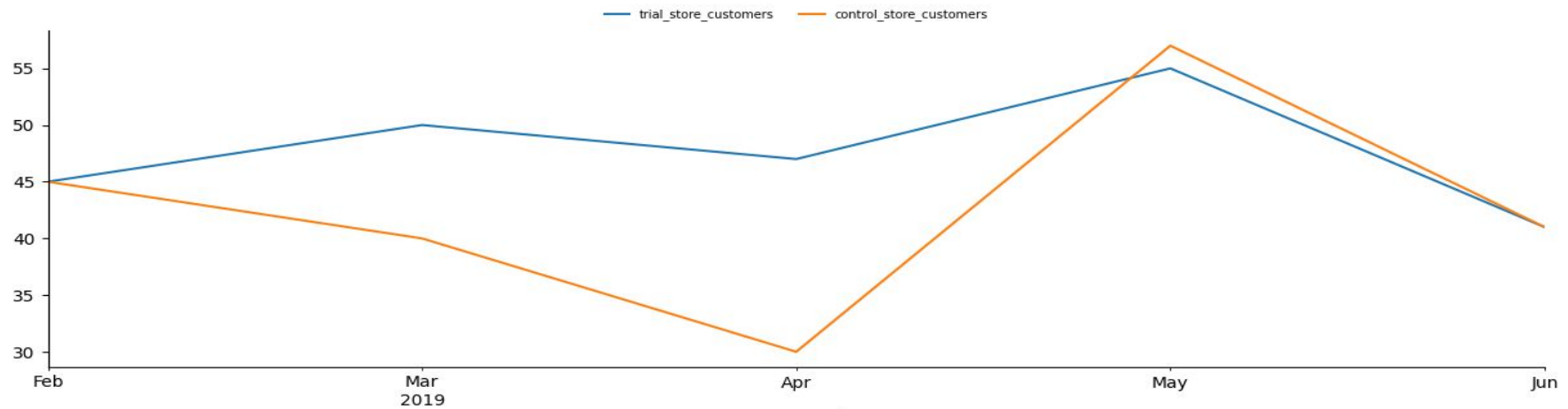
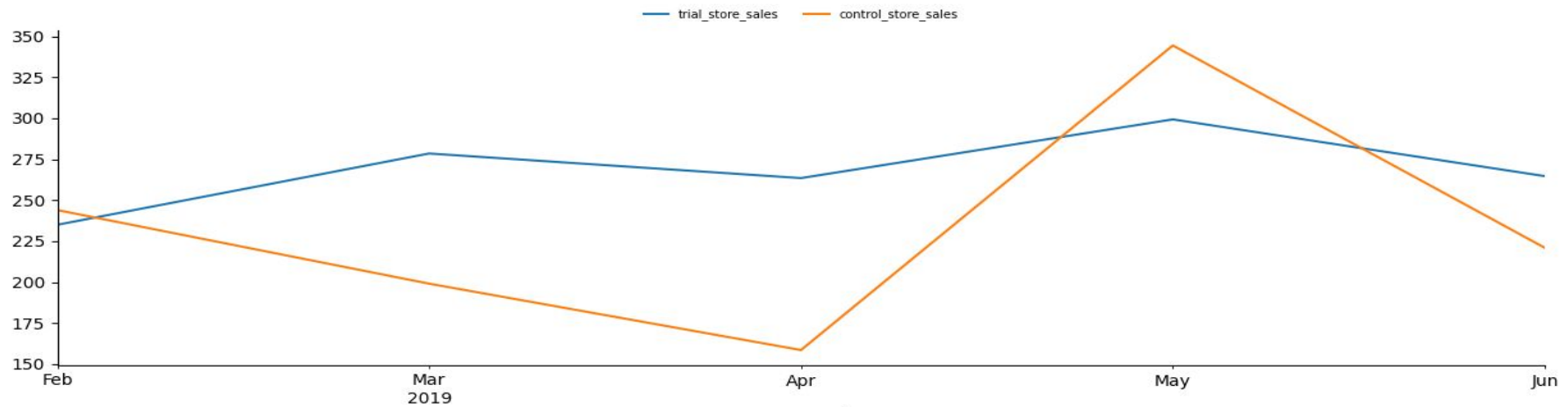
Trial Results

- A sales increase was observed in all trial stores during some point in the trial period, despite varying in length, increase and drivers of each store's sales.
- We'll explore each individual's store sales and drivers.

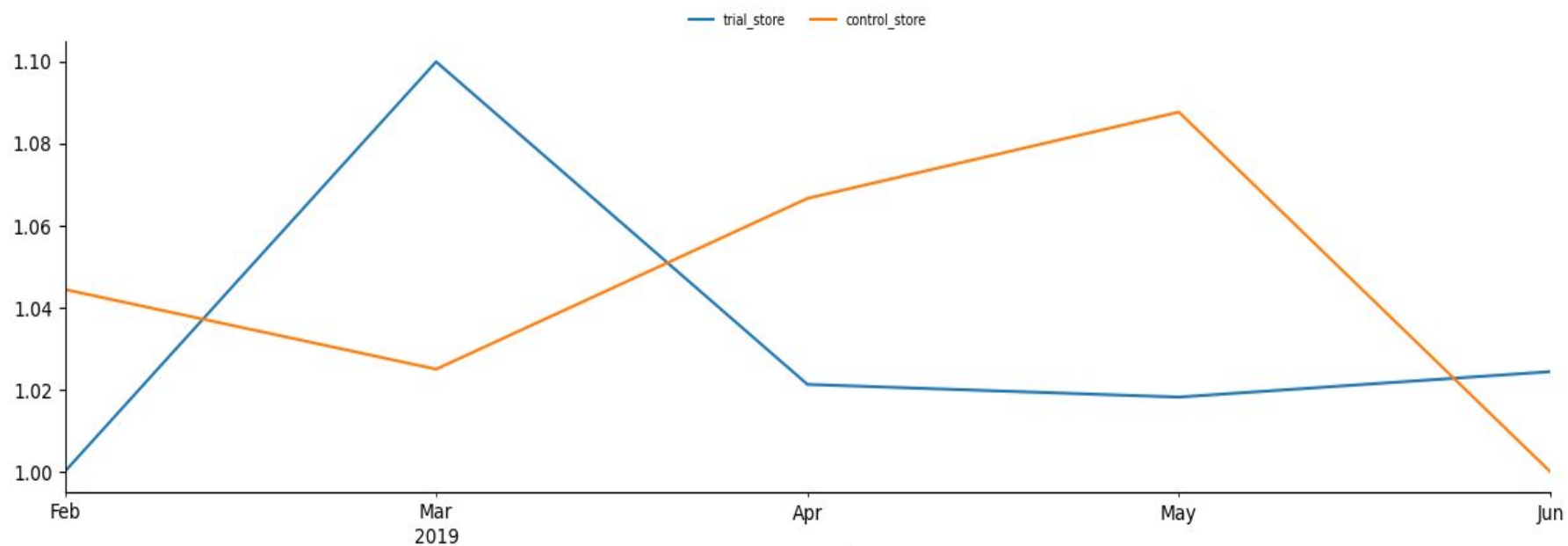
Stores 77 and 23

- A difference was observed in the months of March and April in Monthly sales.
- Major driver to this increase was an increase in the number of unique customers during the same time period of March.
- A change in transactions per customer was also observed in March.
- No difference was evident among the other statistics.
- However, no statistical difference was observed during the trial period on both metrics.

Sales and Number of Customers comparison (Trial Period)



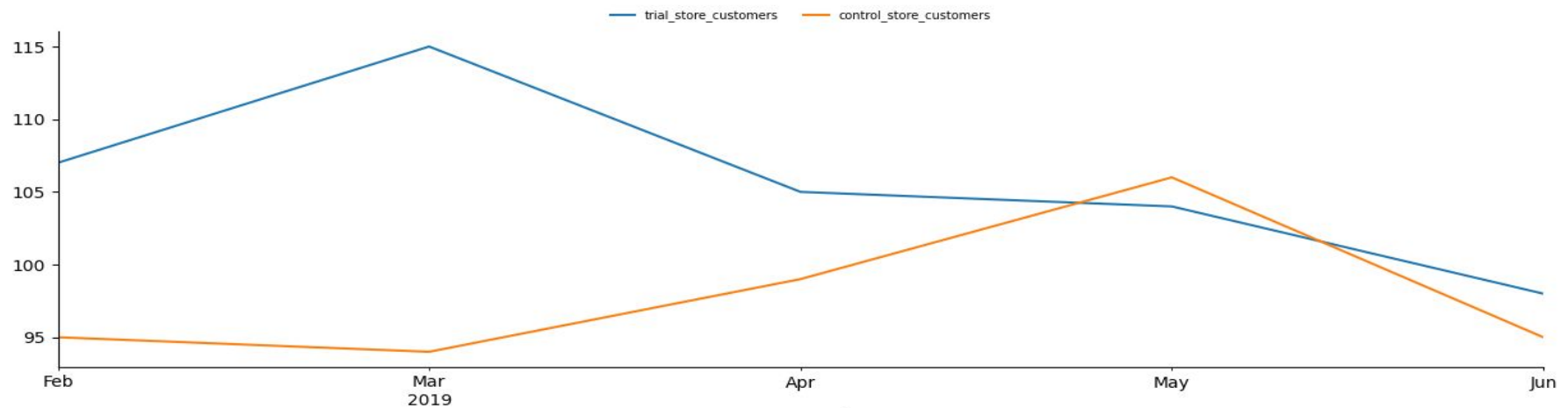
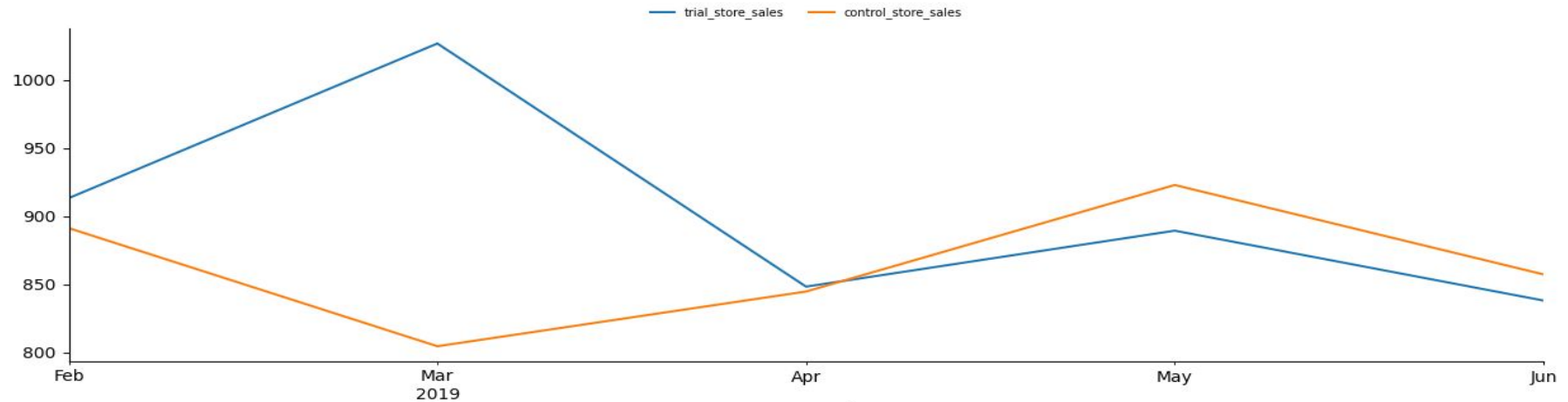
Transactions per customer



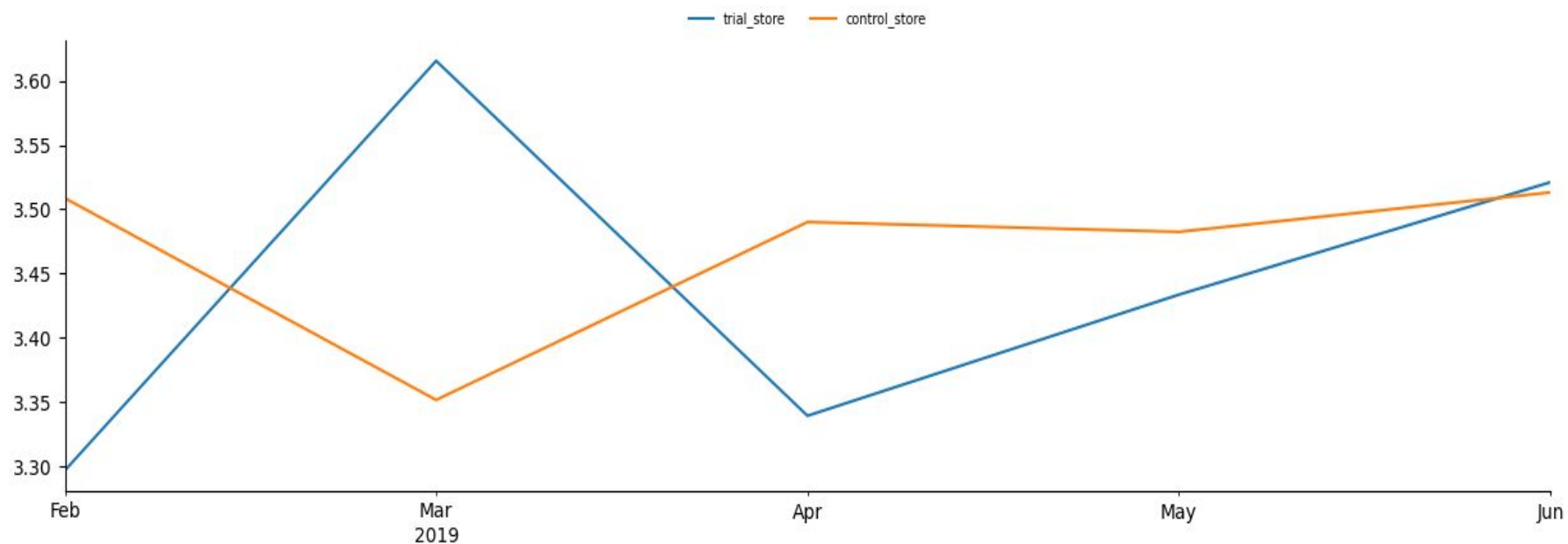
Stores 86 and 255

- A difference in Monthly_total_sales was observed only in March.
- Major driver of this increase appears to be an increase in the average chip price per unit. This could be a result of customers purchasing a more expensive brand of chips.
- We also observed a significant difference in the Number of unique customers over the trial period supporting the visual finding.(T-test)
- It could be worth looking into why the trial resulted in an increase in the number of customers but not in the sales throughout the entirety of the trial period.

Sales and Number of Customers comparison (Trial Period)



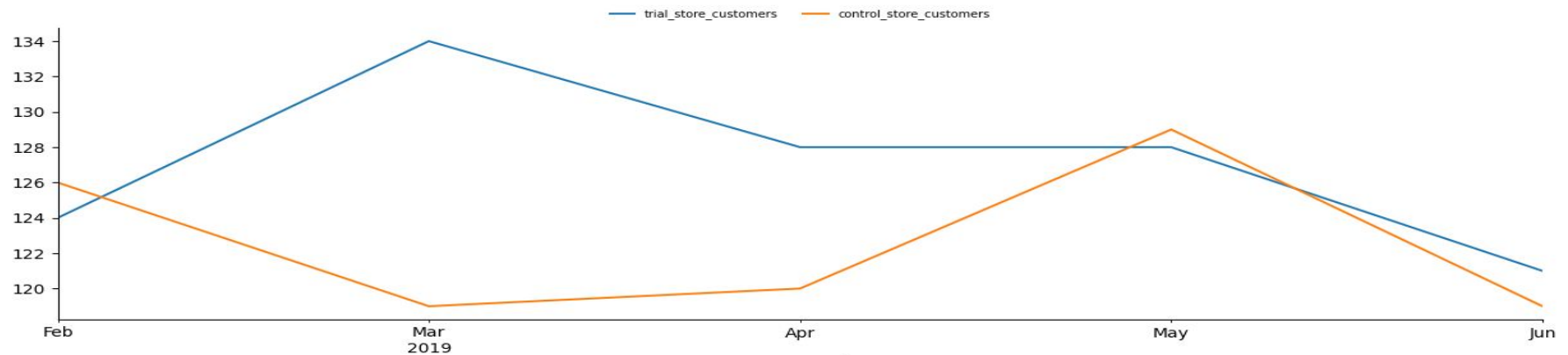
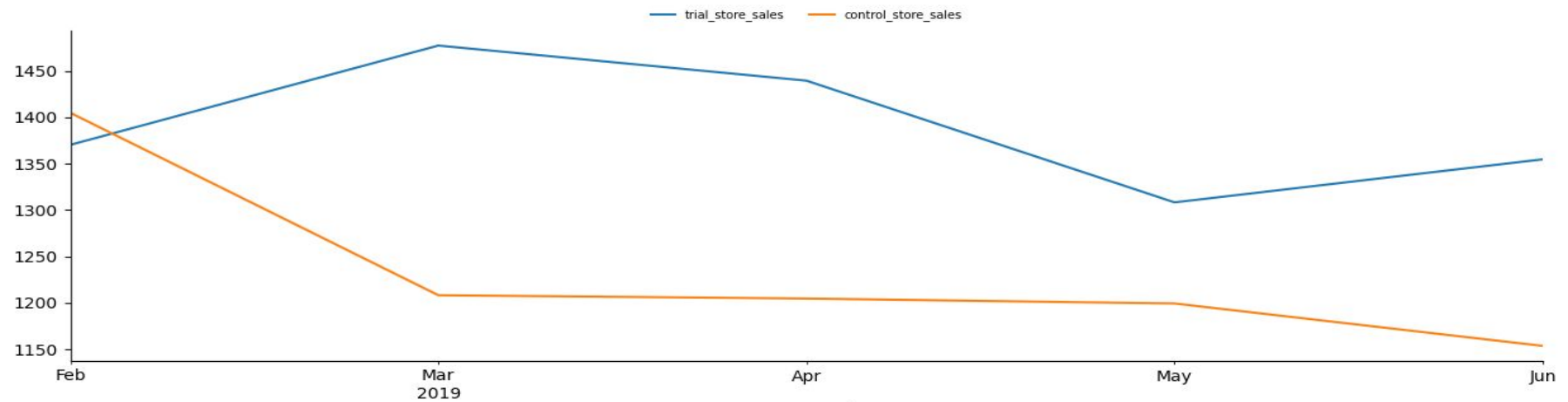
Average chip price per unit comparison



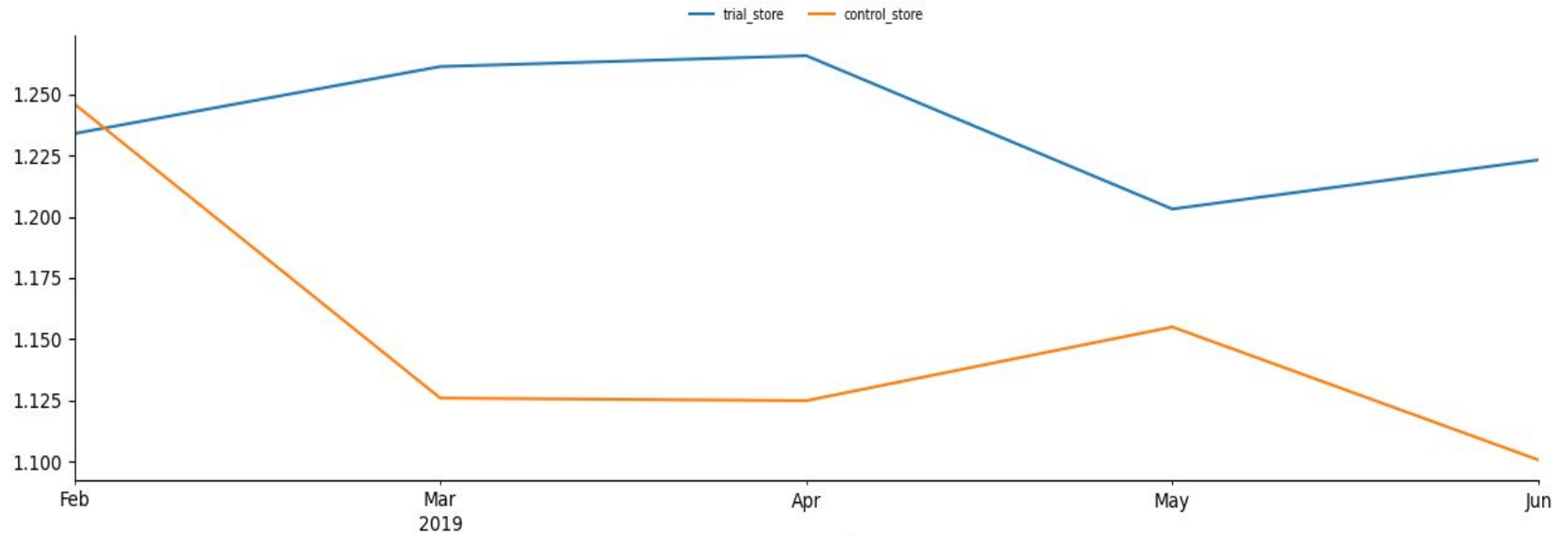
Stores 88 and 237

- A difference was observed in Monthly sales in the months of March, April, May and June.
- On the Number of Customers however, an increase was observed only in the months of March and April.
- A significant difference was also observed in Monthly Sales supporting the visuals as well(T-test)
- Major driver of the sales increase appeared to be an increase in the number of transactions per customer.

Sales and Number of Customers comparison (Trial Period)



Transactions per customer comparison





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