

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

01

Task 1

1. The month of December, just before Christmas, sees a spike in sales (except the day itself). As a result, these are critical moments.
2. The most popular brand is Kettle, which is followed by Smiths, Doritos, and Pringles. As a result, they must be available. 175 gram packs are also the most popular.
3. The most prevalent consumers are mainstream young singles/couples and retirees, who account for a large portion of chip sales.
4. Budget older families have the maximum contribution to sales.

02

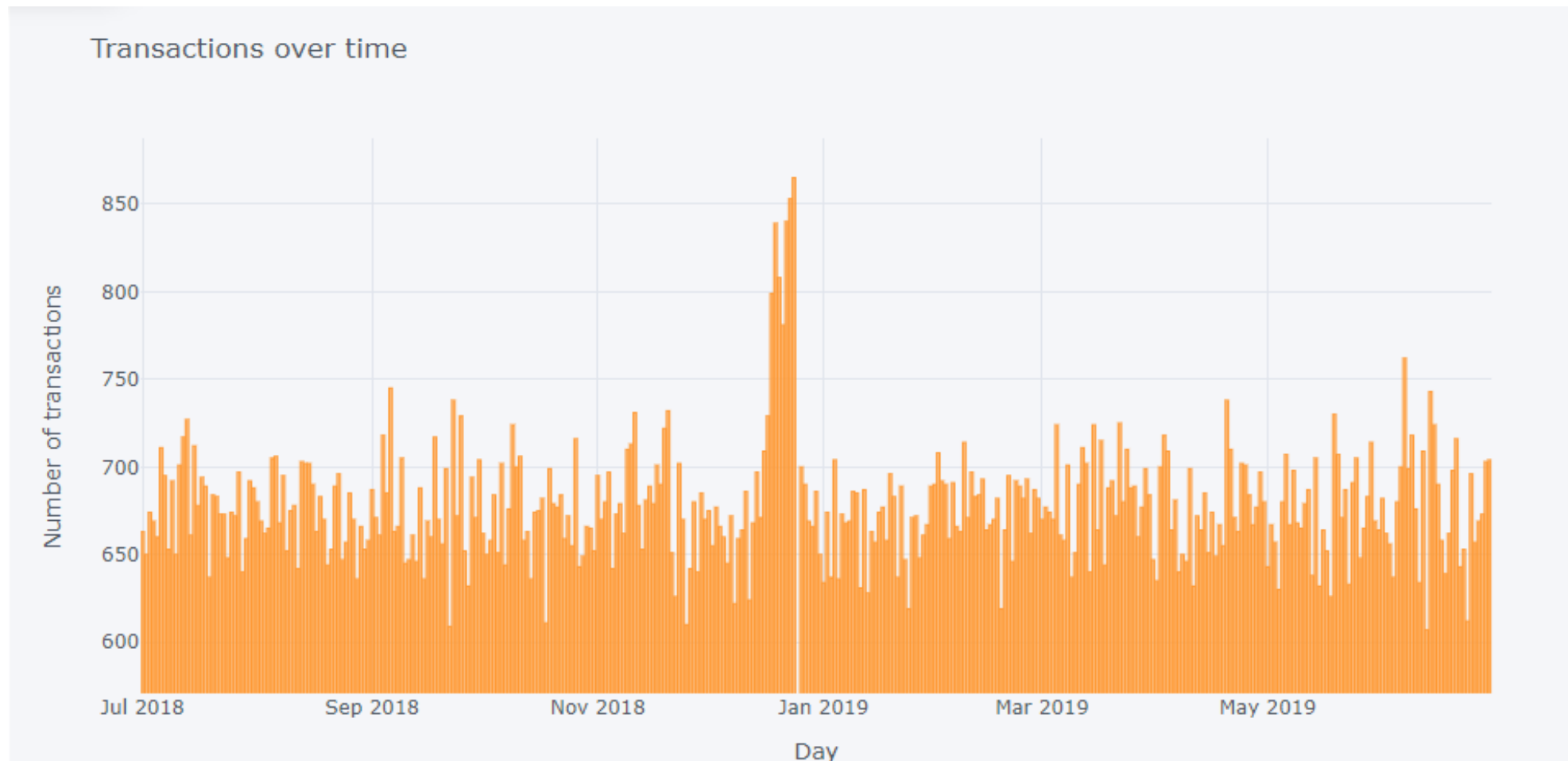
Task 2

1. In all three months, it appears that the number of clients has increased dramatically.
2. This would appear to indicate that the trial had a considerable influence on boosting the number of customers at trial shop 86, but sales were not considerably higher, as we witnessed.
3. We should verify with the Category Manager to see if there were any special promotions in the trial shop that may have influenced the findings by lowering pricing.

01

Customer Analytics

Sales Distribution

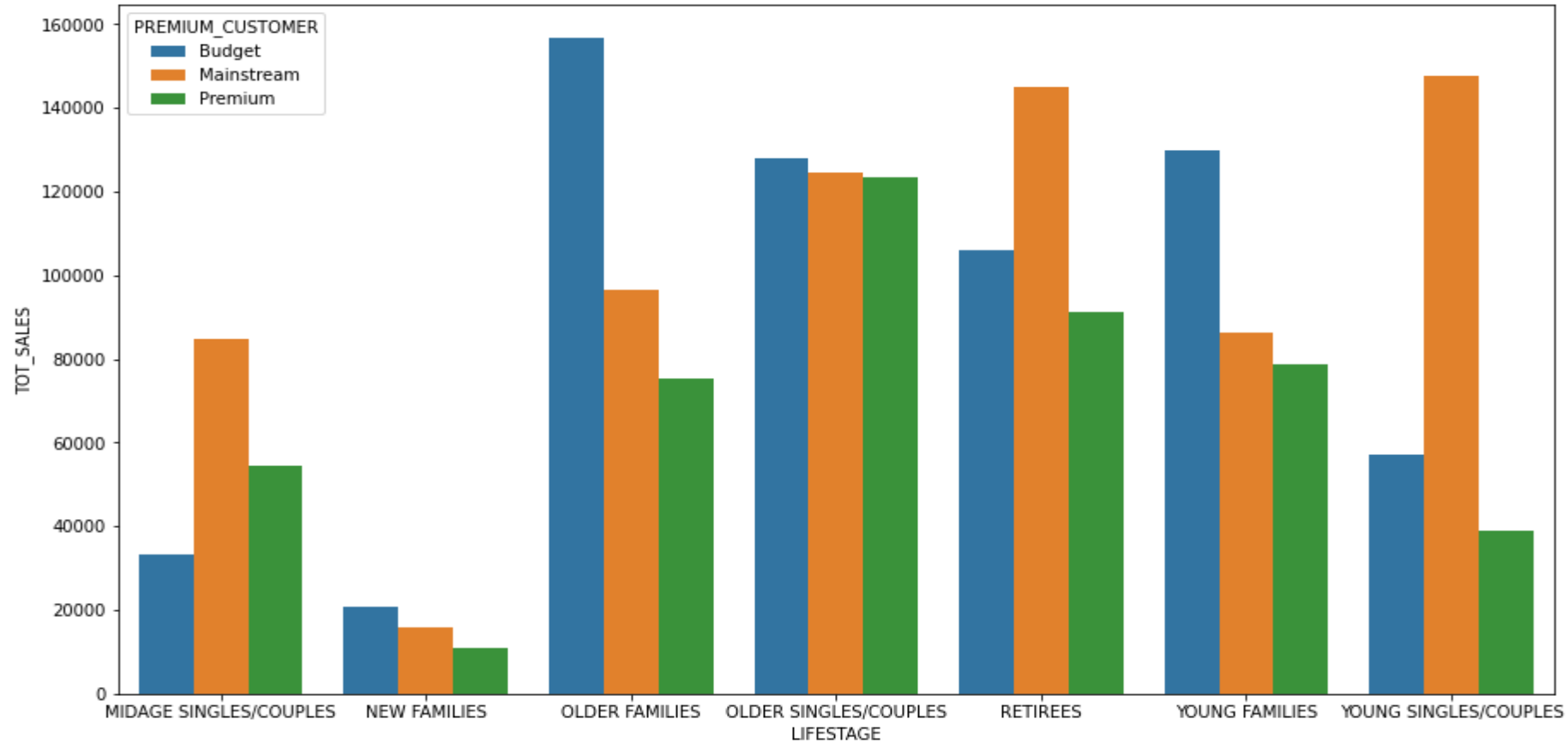


The sales have a sudden hike in the month of December before the Christmas (except the day itself)
Whereas there is no sales on 25th.

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

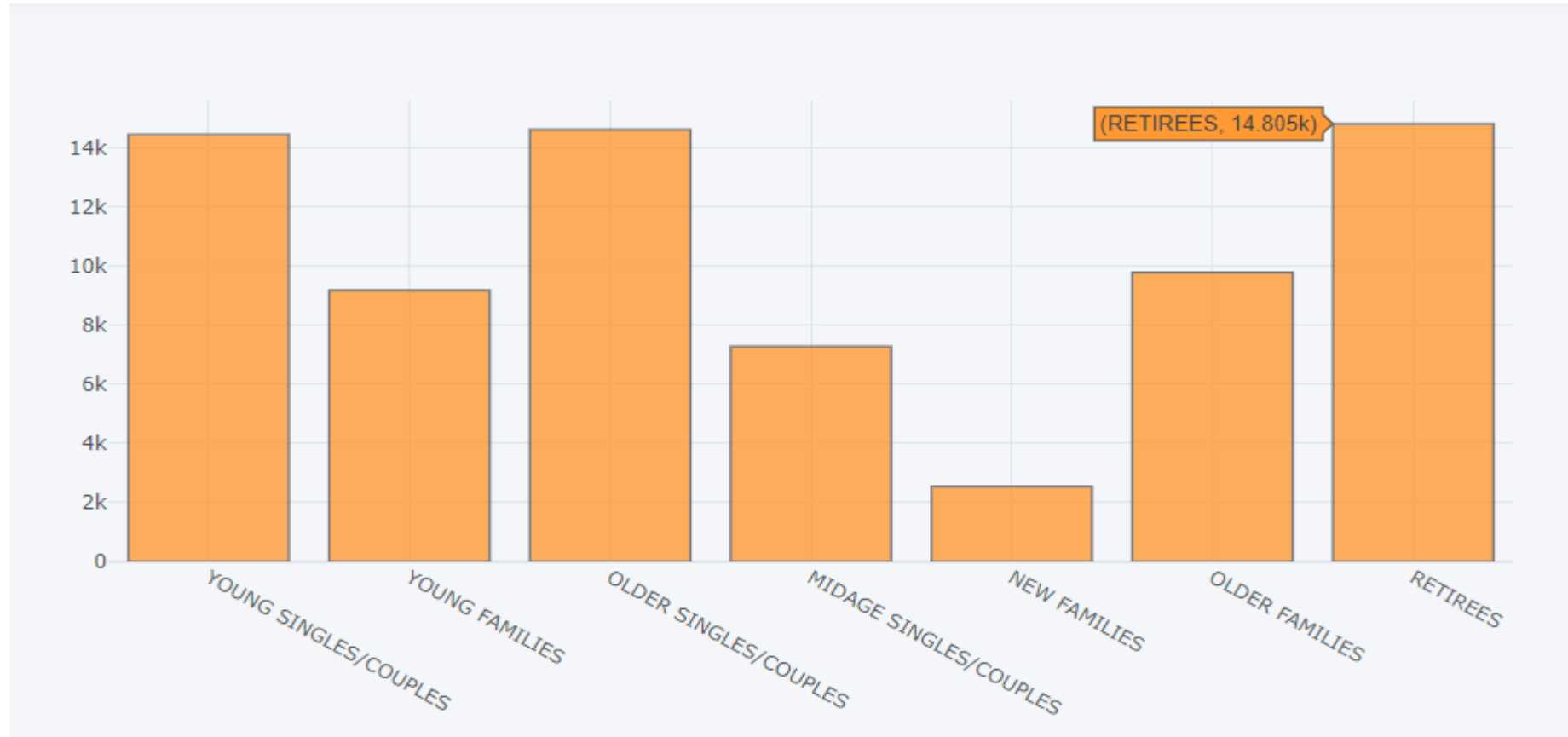
1. The month of December, just before Christmas, sees a spike in sales (except the day itself). As a result, these are critical moments.
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Visualising the proportion of customers by affluence and life stage on this slide



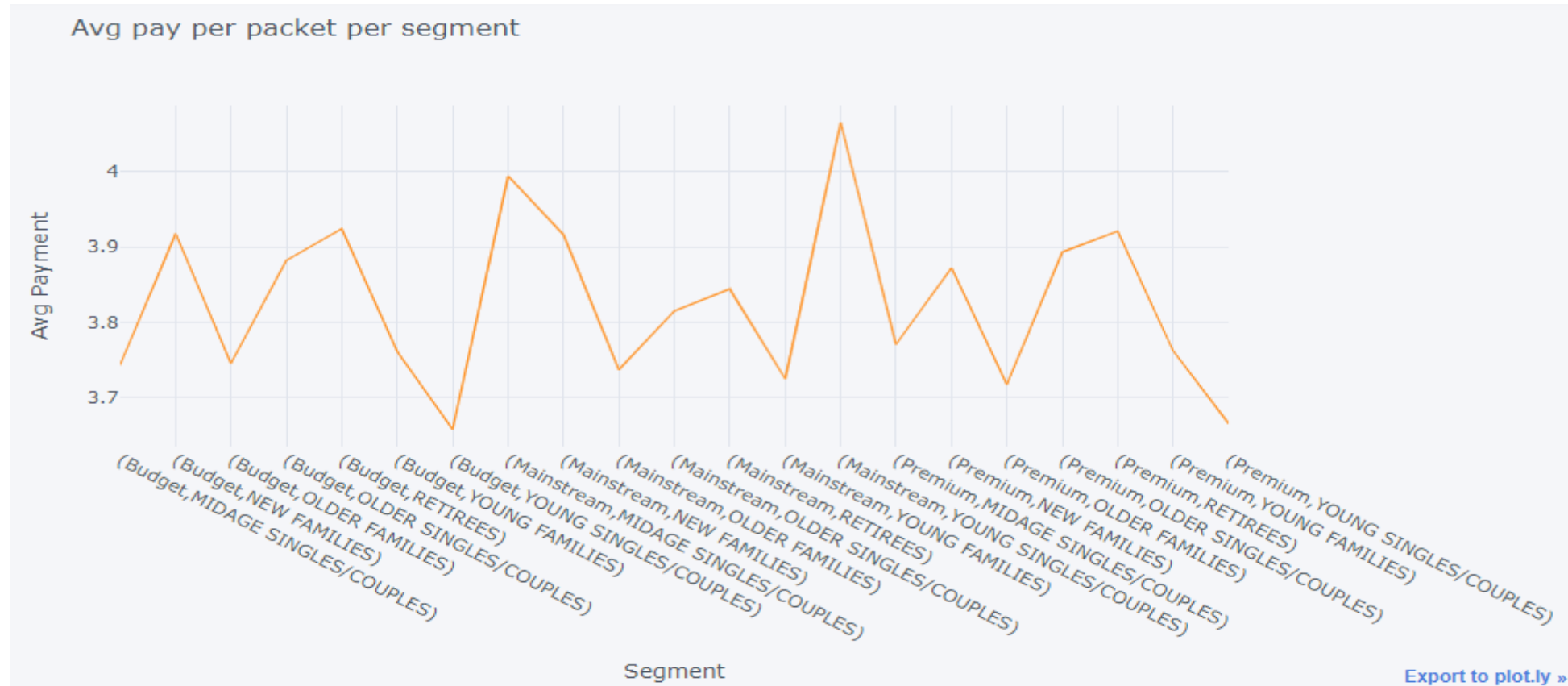
It can be clearly visualized that mainstream young singles/couples, retirees are customers contributing the most

Distribution of life stage of customers



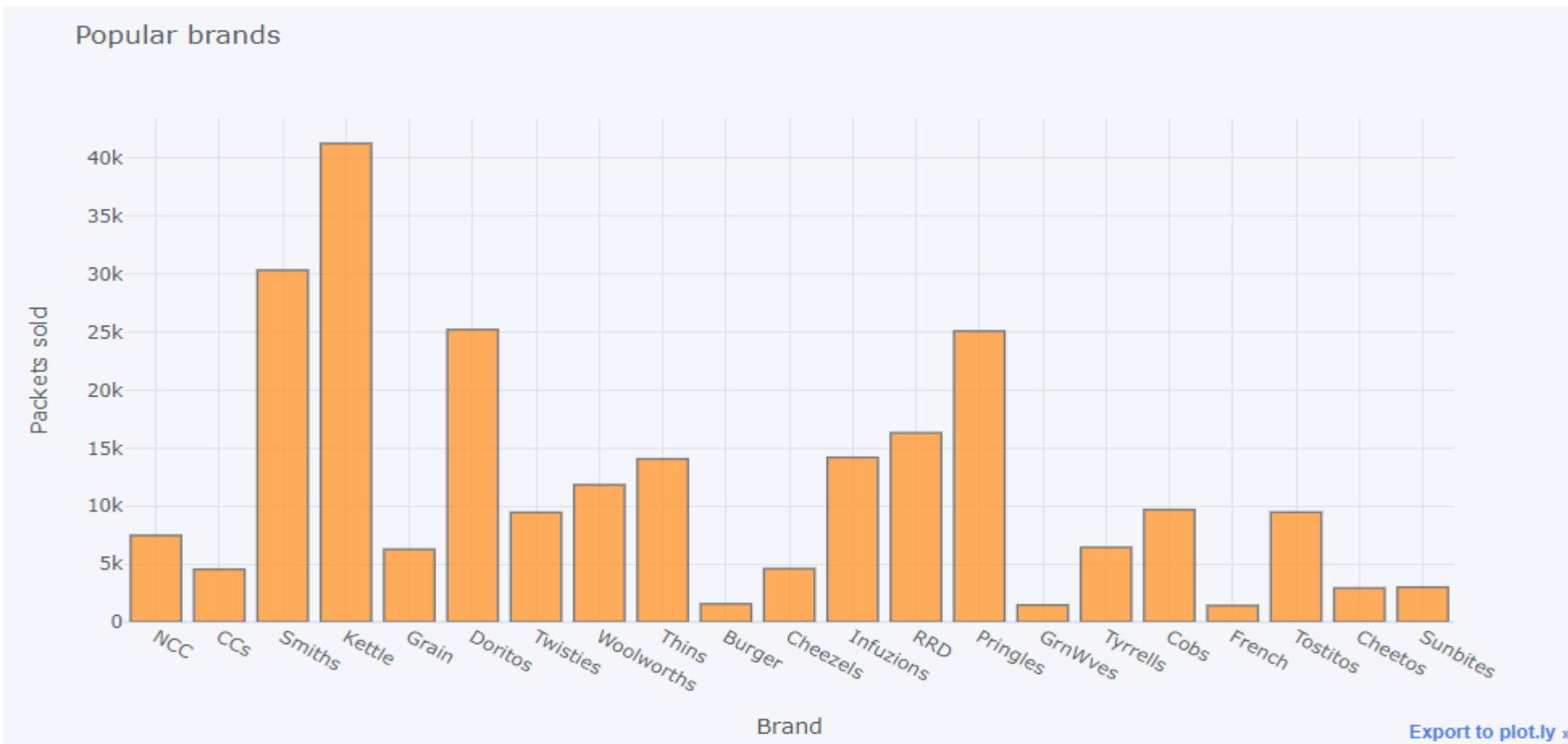
It can be seen that retirees, young singles/couples, retirees are the most common customers

Average expenditure per segment



mainstream young singles/couples also spend the most

Popular brands

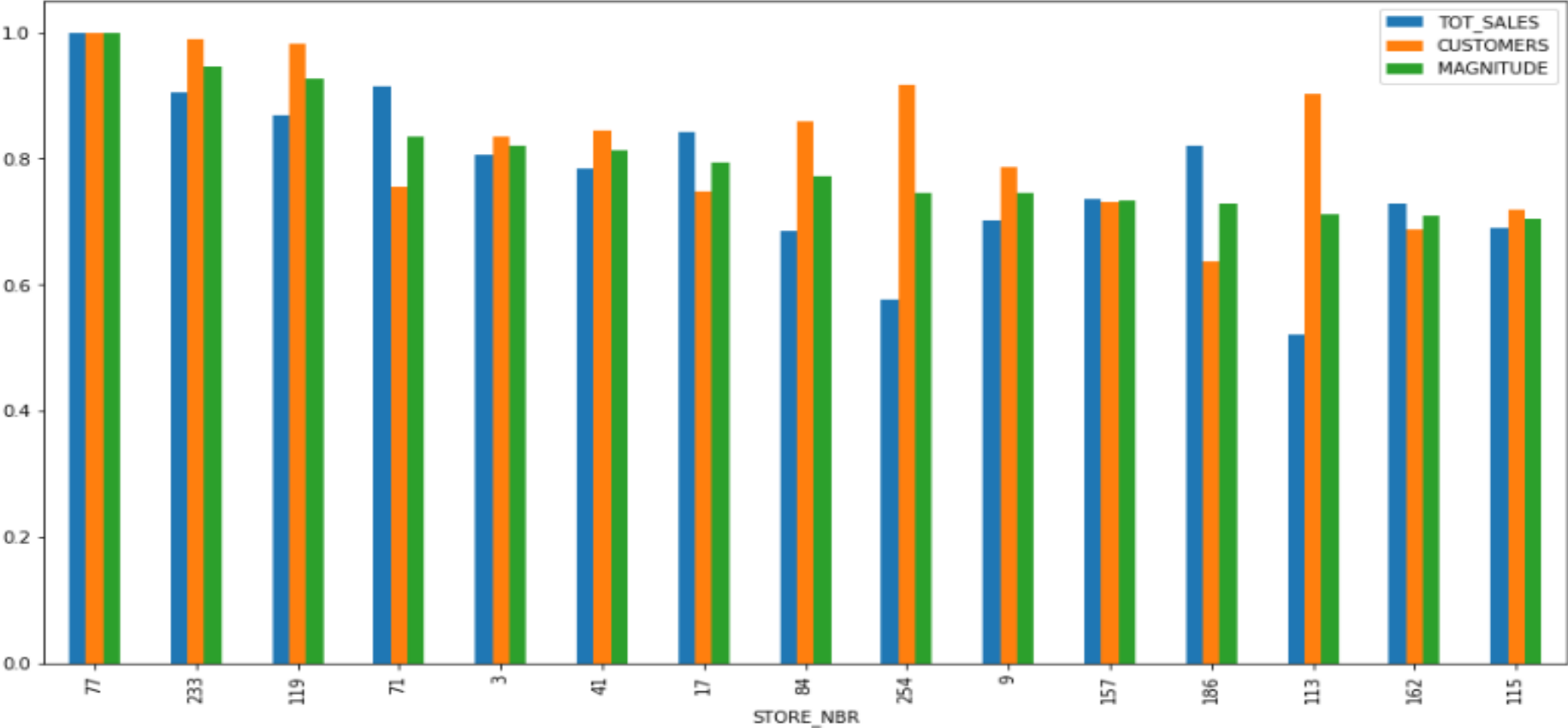


Kettle is the most popular brand followed by Smiths, Doritos and Pringles.

02

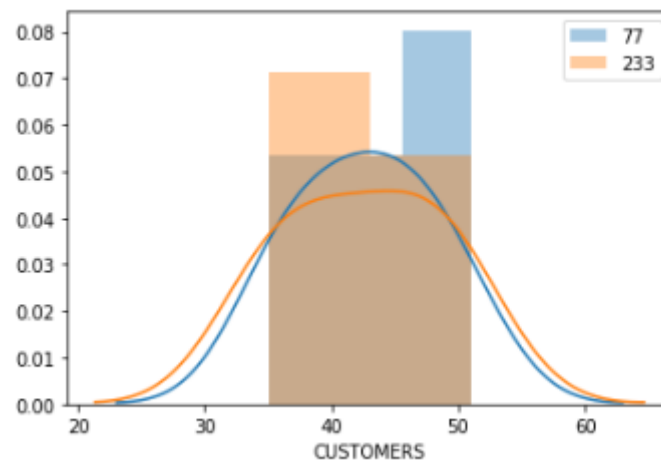
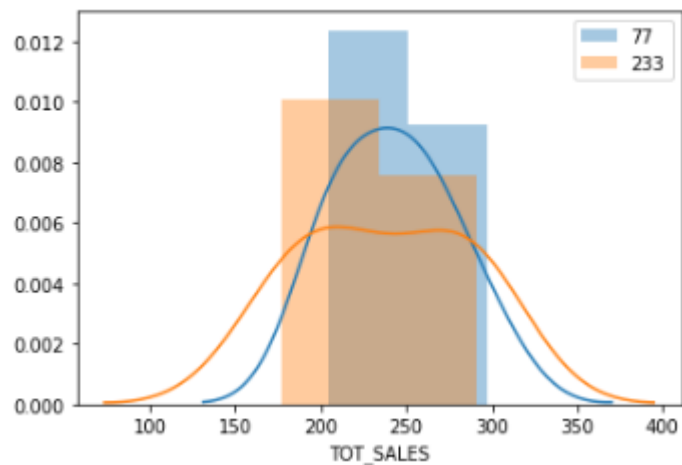
Experimentation and uplift testing

Correlation of the control store 77 vs other stores



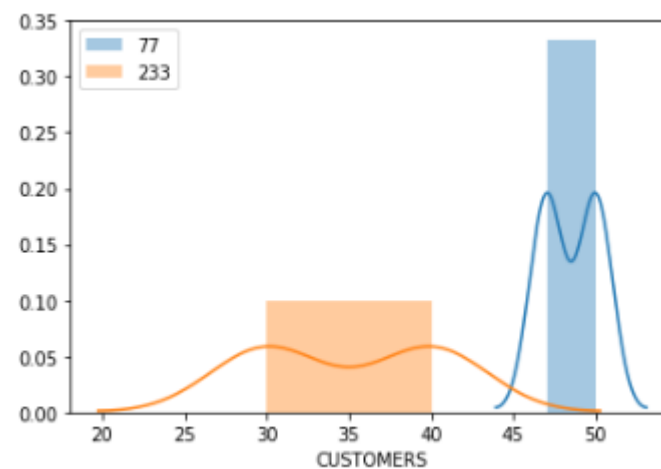
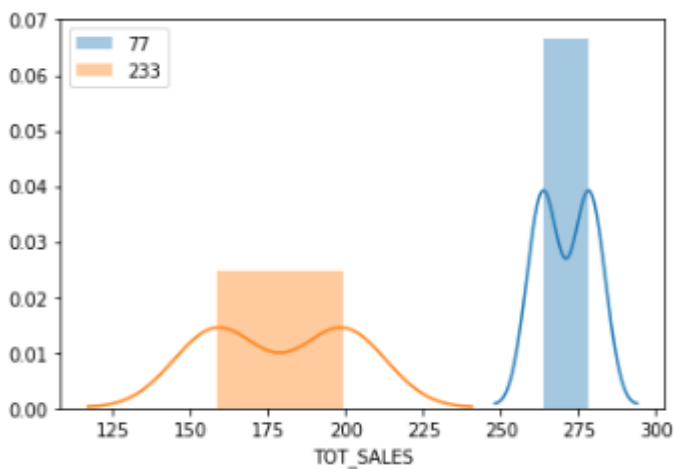
Stores with maximum similarities have the highest correlation. So stores 233, 119 and 79 are the most correlated.

Trial store 77 vs Store 233



Distributions of total sales and customers in pretrial period

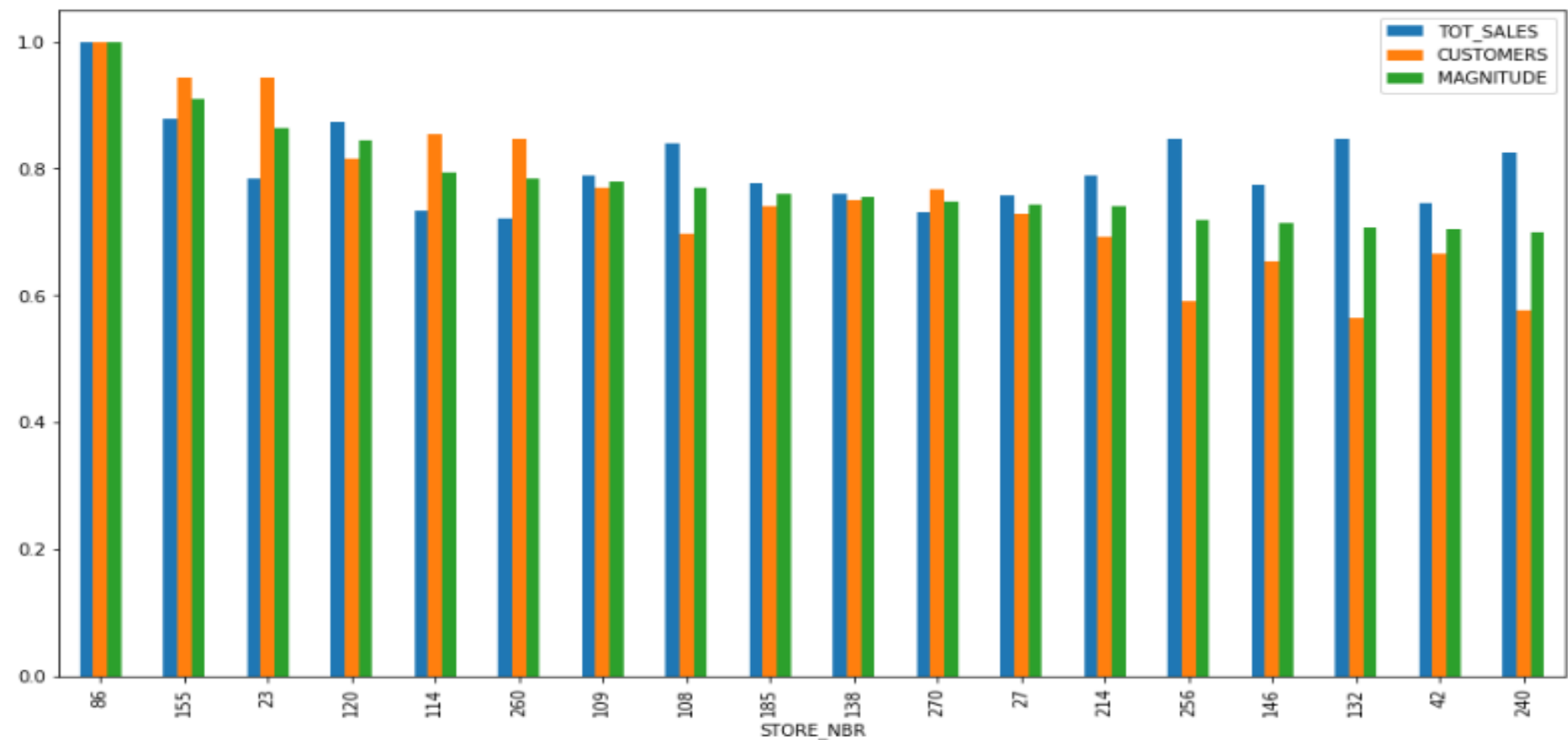
- Means don't vary and there is no significant difference



Distributions of total sales and customers in pretrial period

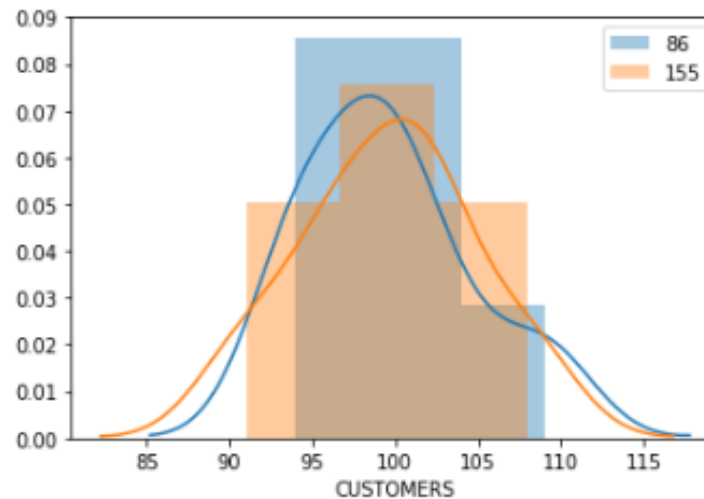
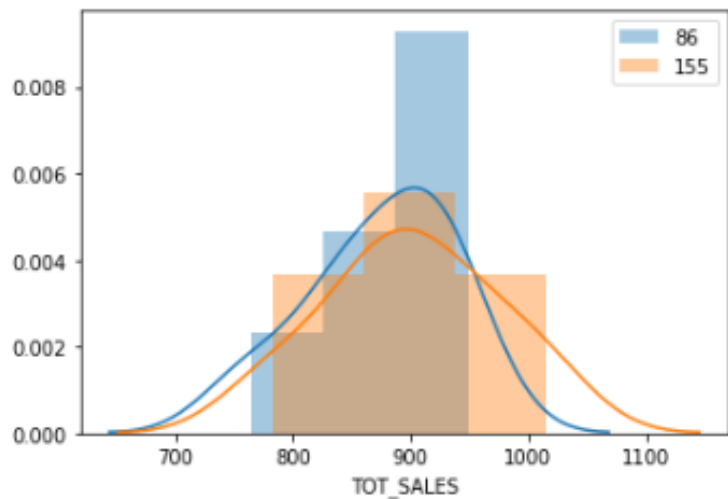
- Means vary and there is a significant difference

Correlation of the control store 86 vs other stores



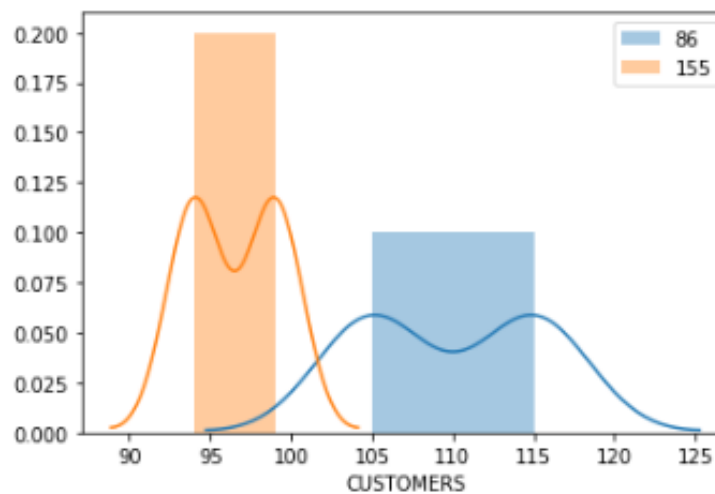
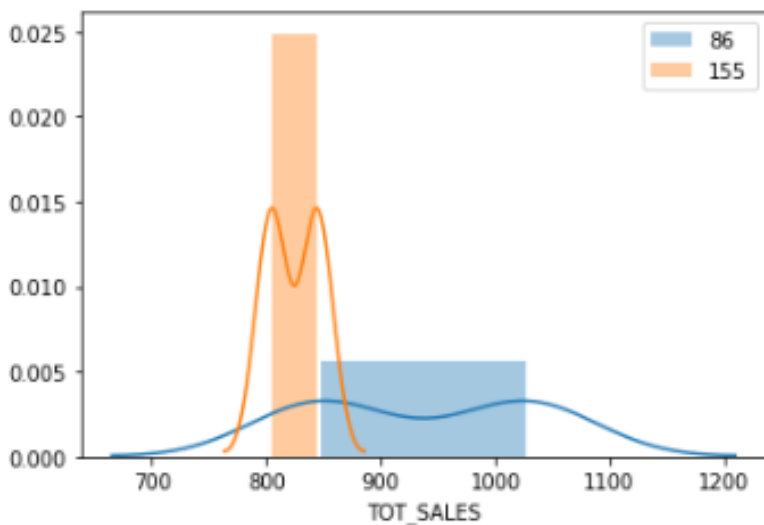
Stores with maximum similarities have the highest correlation. So stores 255, 23 and 120 are the most correlated.

Trial store 86 vs Store 155



Distributions of total sales and customers in pretrial period

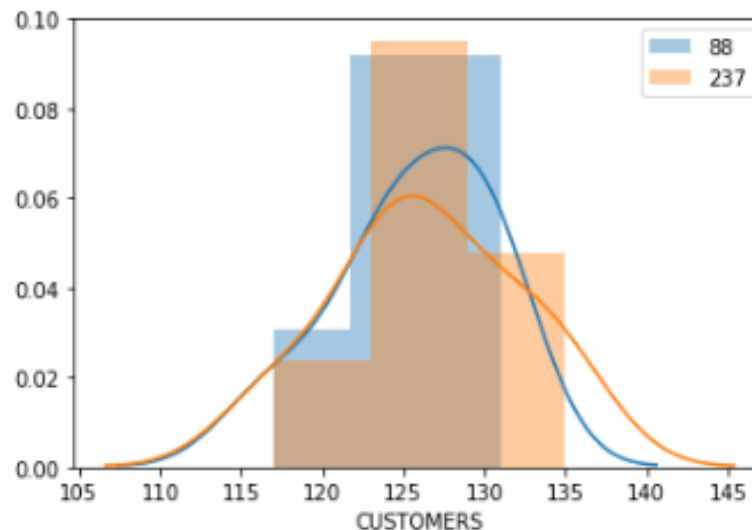
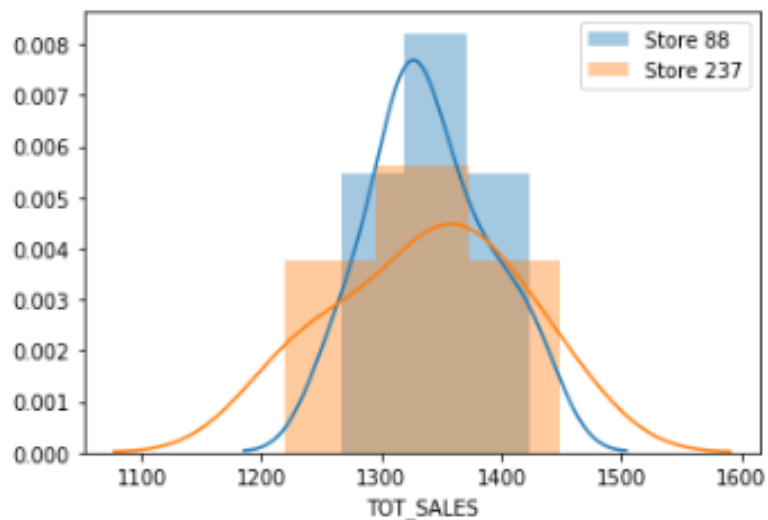
- Means don't vary and there is no significant difference



Distributions of total sales and customers in pretrial period

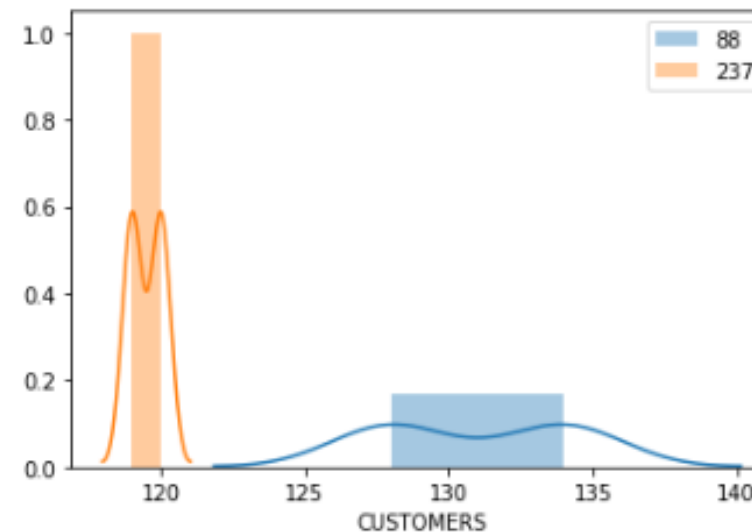
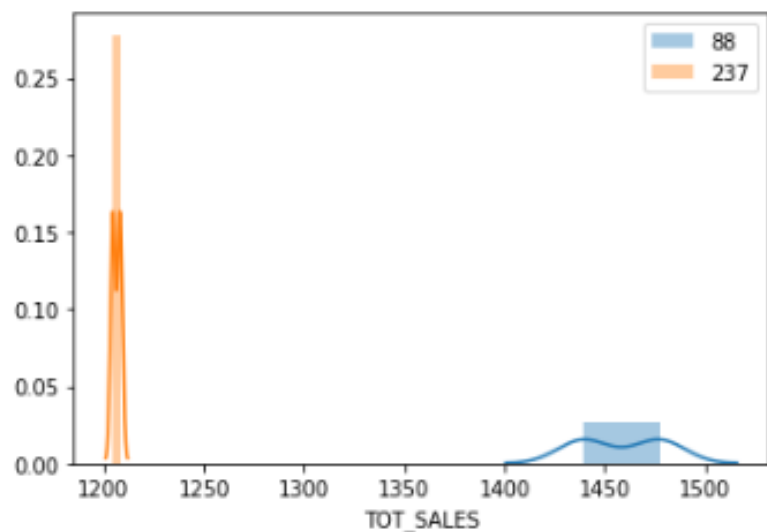
- Means vary and there is a significant difference

Trial store 88 vs Store 237 — Similarly selecting store 237 as trial store for store 88



Distributions of total sales and customers in pretrial period

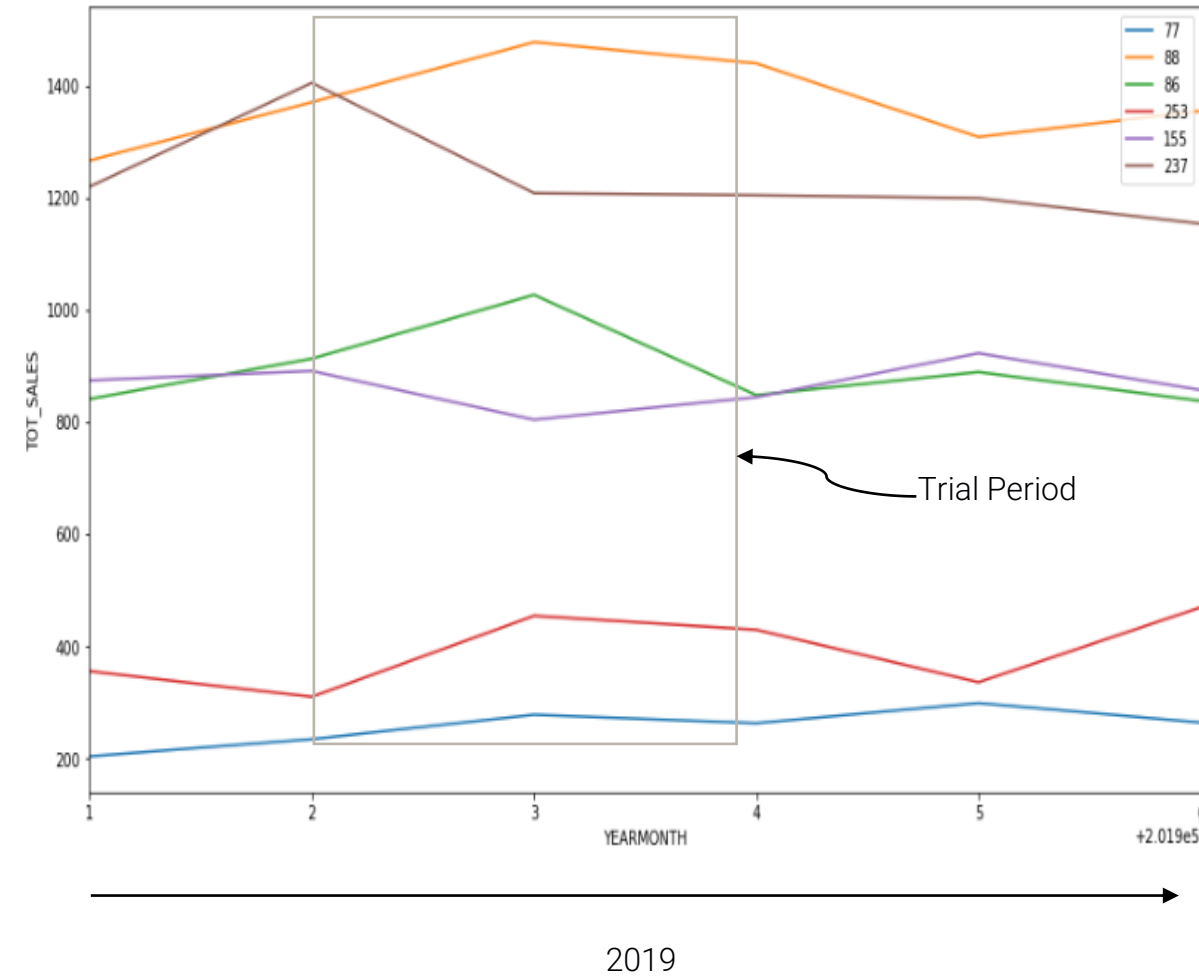
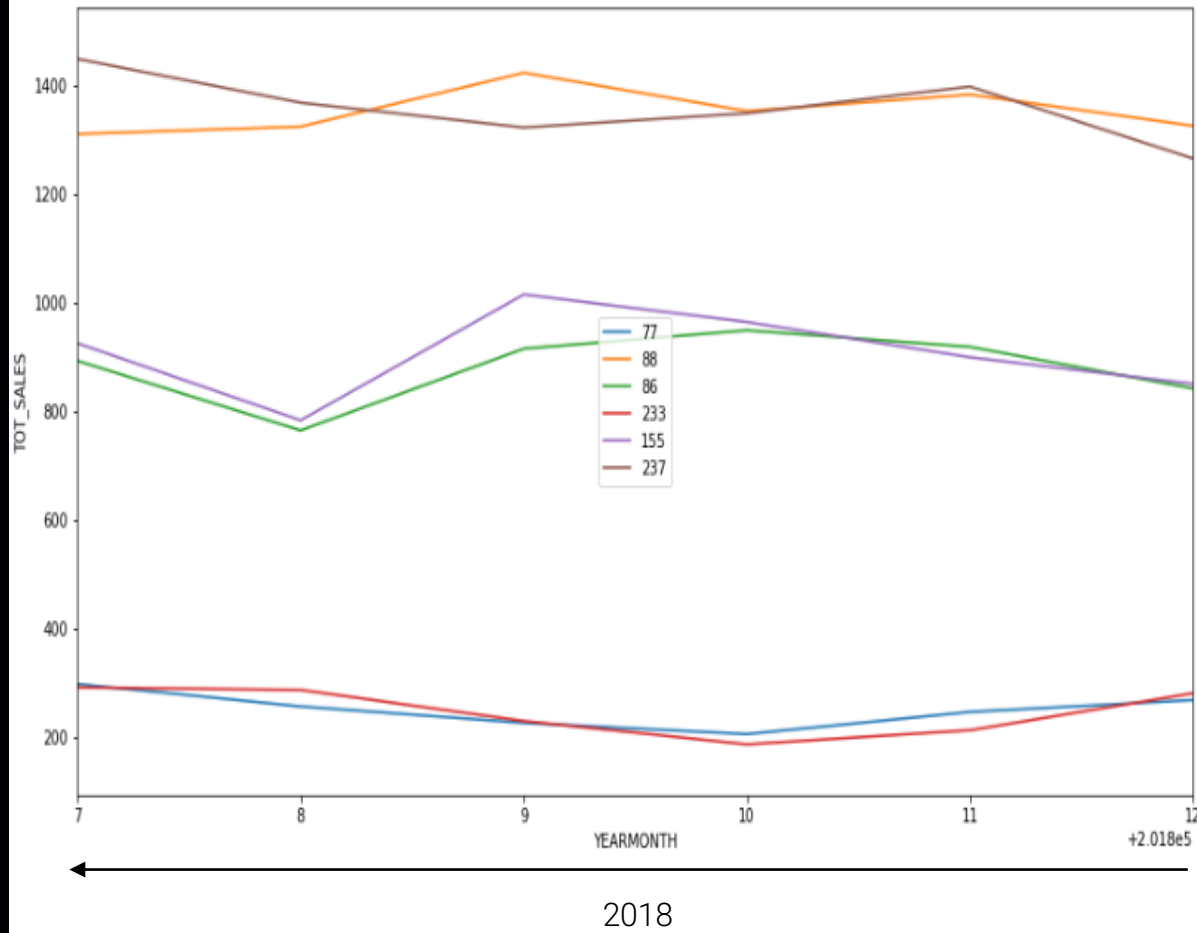
- Means don't vary and there is no significant difference



Distributions of total sales and customers in pretrial period

- Means vary and there is a significant difference

The control store were set up to measure sales whether trial store are doing better during the trial period or not.



Conclusion

- For trial stores 77, 86, and 88, we discovered control stores 233, 155, and 237.
- During the trial period, the findings for trial shops 77 and 88 indicate a substantial change in at least two of the three trial months, but not for trial shop 86.
- We can check with the client to see whether the trial was implemented differently in trial shop 86, but the trial showed a considerable boost in sales overall.

Recommendations

1. Stocks should be high in December before the Christmas season.
2. Kettle, Smiths, Doritos, and Pringles being the most popular.
3. Mainstream young singles/couples and retirees make for a large portion of chip sales, thus they require special attention.
4. Budget older families contribute the most to sales.
5. Control shops 233, 155, 237 would be an excellent candidate for trial shops 77, 86, and 88, respectively.



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