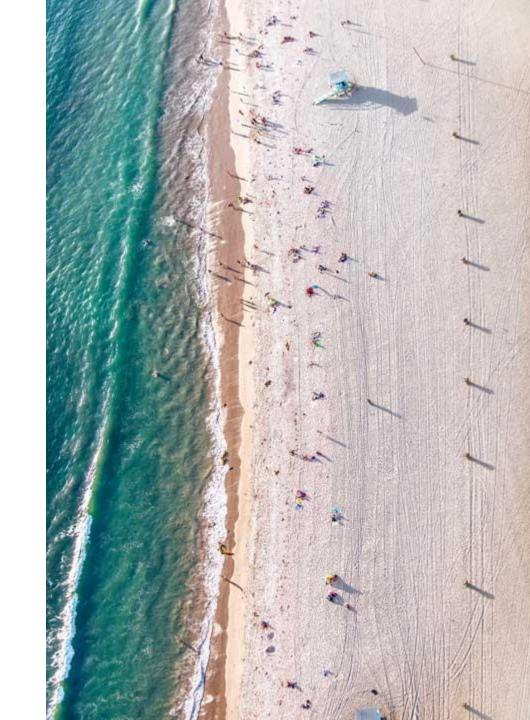
Category review: Chips

Retail Analytics





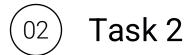
Executive summary



We were having a total of 21 category of customers based on Life-Stage and Premium / Mainstream/Budget, out of those 21 categories we extracted out 9 categories of customers that were the major chip buyers based on parameters like:-

- 1.) Number of transactions per customer.
- 2.) Average number of packets of chips purchased by one customer in one transaction.
- 3.) Average price of product purchased by one customer in one transaction.

Then we found out that what flavours of chips, those 9 categories of customers were fond of. In this way we can maintain the stock of Chips in accordance with the likes and dislikes of our major chip buying categories.



Change in layout of Store number –77, 86, 88 from February 2019 to April 2019, caused the following changes in Total Sales:-

- 1.) For Store-77, there was considerable increase in Sales during March 2019 and April 2019.
- 2.) For Store-86, there was not a noticeable change in Sales during the Trial period from Feb 2019 to April 2019.
- 3.) For Store-88, same as store-77, there was a considerable increase in Sales of Chips during March 2019 and April 2019.



Details of findings of Task-1

For a super-market store the customers of concern are the type of customers that:-

- 1.) Visit the store regularly and
- 2.) Purchase items in a good quantity,

therefore along with the avg price of product that a customer of a particular category buys, we also need to see that on an avg, how many transactions a customer of a particular category does, and also on an avg how many packets of chips does a customer, of a particular category, buys in one transaction.

Based on the above factors we have extracted the following 9 category of customers from the given 21 categories:-

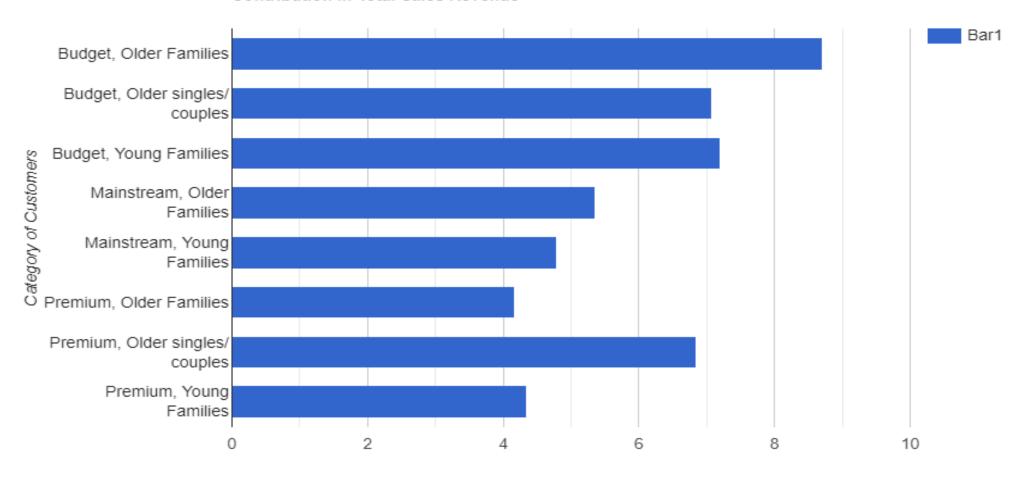
- 1.) Budget, Older Families
- 2.) Budget, Older singles/couples
- 3.) Budget, Young Families
- 4.) Mainstream, Older Families
- 5.) Mainstream, Young Families
- 6.) Premium, Older Families
- 7.) Premium, Older singles/couples
- 8.) Premium, Young Families

9.) Mainstream, Midage Couples/Singles



More than 53% of Total Sales were from below 9 categories of customers

Contribution in Total Sales Revenue

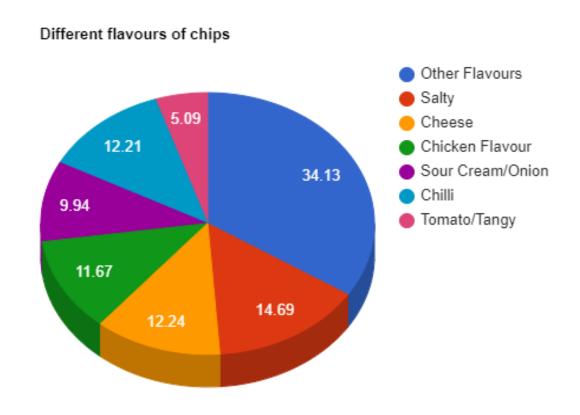


Percentage of contribution

.........

The stock of chips must be in accordance with the likes and dislikes of the major Chips buyers.

From the given data we found out that which flavour of chips was purchased in what amount, by those 9 category of customers.





From Task 1 findings we can infer that:-

- Older and Young families are major Chips buyers.
- These category of customers are fond of flavours of chips like Salty, Cheese, Chilli.
- Tangy/Tomato flavour is least purchased.



02

Trial store performance

Store number 77,86,88 were chosen as trial stores, where the layout of Chips section was changed during Feb 2019 to April 2019.

We selected control stores for each of the trial stores. These control stores are stores that have a similar performance as of Trial stores in the pre-trial period from July 2018 to January 2019.



On what basis are control stores selected and what do the control stores actually represent....

The Control stores are defined here as the stores that have a similar performance as of trial stores in the pre-trial period from July 2018 to January 2019:-

The performance is compared on basis of factors like:-

- Similar Monthly Sales revenue
- Similar Monthly number of transactions
- ➤ One Control store is founded for every Trial store, these Control stores serve as a reference store for the trial store in the trial period from Feb 2019 to April 2019.
- > During the trial period we assume that the Trial stores would have performed similar to their respective Control store if no change was made in layout of Trial stores.
- > Thus, by comparing performance of Trial store with its respective Control store during the trial period, we can come to a conclusion that whether the change in layout of Trial store increased or decreased the performance of the store.

Using the Data provided we found out the Control stores for each Trial store:-

- Trial store-77 <--> Control store-233
- Trial store-86 <--> Control store-138
- Trial store-88 <--> Control store-237



Details of findings of Task-2

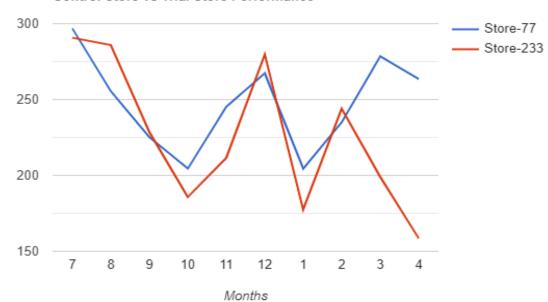
On comparing performance of Trial stores with their respective Control stores during Trial period, we found out that:-

- Trial store-77 performed better during the Trial period, as its monthly revenue was considerably higher than monthly revenue of its Control store-233, especially during March-2019 and April-2019.
- Performance of Trial store-86 was not much altered during Trial period, as there was'nt any significant difference in monthly revenue of Trial store-86 and its Control store-138 during the Trial period.
- Trial store-88 performed better during the Trial period, as its monthly revenue was considerably higher than monthly revenue of its Control store-237, especially during March-2019 and April-2019.

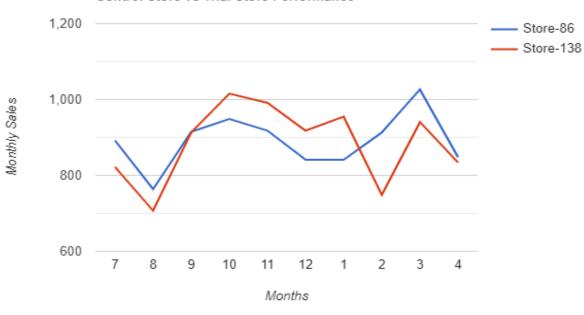
We can conclude that change in layout was successful in case of Store number 77, 88, while it could'nt do better for Store number-86. We can review these findings by having a look at the graphs provided ahead.



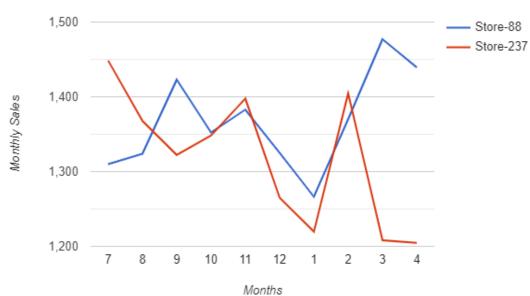
Control Store vs Trial Store Performance



Control Store vs Trial Store Performance



Control Store vs Trial Store Performance





Monthly Sales

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.



Disclaimer: This document comprises, and is the subject of intellectual property (including copyright) and confidentiality rights of one or multiple owners, including The Quantium Group Pty Limited and its affiliates (**Quantium**) and where applicable, its third-party data owners (**Data Providers**), together (**IP Owners**). The information contained in this document may have been prepared using raw data owned by the Data Providers. The Data Providers have not been involved in the analysis of the raw data, the preparation of, or the information contained in the document. The IP Owners do not make any representation (express or implied), nor give any guarantee or warranty in relation to the accuracy, completeness or appropriateness of the raw data, nor the analysis contained in this document. None of the IP Owners will have any liability for any use or disclosure by the recipient of any information contained in, or derived from this document. To the maximum extent permitted by law, the IP Owners expressly disclaim, take no responsibility for and have no liability for the preparation, contents, accuracy or completeness of this document, nor the analysis on which it is based. This document is provided in confidence, may only be used for the purpose provided, and may not be copied, reproduced, distributed, disclosed or made available to a third party in any way except strictly in accordance with the applicable written terms and conditions between you and Quantium, or otherwise with Quantium's prior written permission

