# Improving the Average Order Value for Milk Basket

**3rd August 2019**

## OVERVIEW

We aim to suggest methods and share insights into the order placing trends at Milk Basket and hope to improve the Average Order Value By increasing Revenue and Decreasing the Number of orders.

## GOALS

1. Improve the average order value
2. Recommend customers about related products

## MILESTONES

### Get basic and broad insights from the dataset

Using data analysis figure out basic trends such as

1. Peak hours during the day.
2. Number of orders placed per month.
3. Maximum and minimum number of items in an order.
4. Customer segmentation based on purchase data.
5. Average Order Value distributions.

### Study and Influence User Behavior

Identify Tier-1 customers (defined by certain purchase parameters, CLV etc). Cluster them meaningfully, and study their behaviour relative to other users in these clusters.

Try to predict the likelihood of a T-n customer becoming a T-1 customer given current data.

Shape the behavior of the T-n customer so that he becomes like a T-1 customer in the same cluster. Use insights from the most similar T-1 customers.

| | UID | no_of_orders | mean_order_value | std_deviation | max_order | min_order | total_order_value |
|---|---|---|---|---|---|---|---|
| 0 | 20932016 | 81 | 52.692469 | 25.650458 | 145.030 | 0.0000 | 4268.09000 |
| 1 | 11425904 | 50 | 56.211294 | 55.022871 | 265.200 | 4.0000 | 2810.56471 |
| 2 | 18601856 | 56 | 44.976607 | 27.907496 | 148.740 | 9.5000 | 2518.69000 |
| 3 | 14554736 | 38 | 79.396842 | 66.221772 | 327.020 | 0.0000 | 3017.08000 |
| 4 | 28784448 | 39 | 98.577949 | 49.434894 | 276.000 | 25.0000 | 3844.54000 |
| 5 | 14724528 | 16 | 322.198437 | 292.140210 | 813.155 | 18.0000 | 5155.17500 |
| 6 | 29194144 | 54 | 68.268148 | 50.994404 | 210.000 | 8.0000 | 3686.48000 |

## Identify related products

Try different algorithms such FPgrowth to determine related products for user recommendation

## Tech Stack

Python,Jupyter, Numpy, Pandas, Scikit learn,pickle and similar python libraries

## Frequency of Day of week Vs Hour of day



## Frequency of order by month of year