




# “You Are What You Eat” Customer Segmentation

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# Agenda

- Project Overview
- Business Problem
- The Data and Method
- Process
- Results and Insights
- Summary



# Project Overview

ABC Grocery Store has accumulated large amount of data from customers' day-to-day shopping. The wealth of the data could render the leadership team invaluable insights into their customers.

This project provide a customer segmentation based on the relative weight of the customer's spend across the product categories. Applying the Kmeans Clustering algorithm, we grouped the customers into three segments. The leadership team can use this segmentation to customize their campaign and promotional offering and drive more sales.

# Business Problem

870 customers and is ever-growing

210 transactions every day ➡ Over 76,600 transactions per year !

But how to capitalize on it when there is so much?

Divide the customers into groups, identifying the key characteristics within a group and maximizing the value of each customer to the business



# Data and Method

- Over 38,000 pieces of transaction data from April 2020 to September 2020 providing the information on customers, product categories, transaction date, sales value and quantity.
- Apply K-Means Cluster algorithm to isolate patterns within this unlabelled data

# Process

1

Data Understanding

2

Data Preparation

3

Data Modelling

4

Uncover Insights

# Results and Insights

3 distinct customer groups

## Group 1

Balanced shopping basket across all four product categories

## Group 2

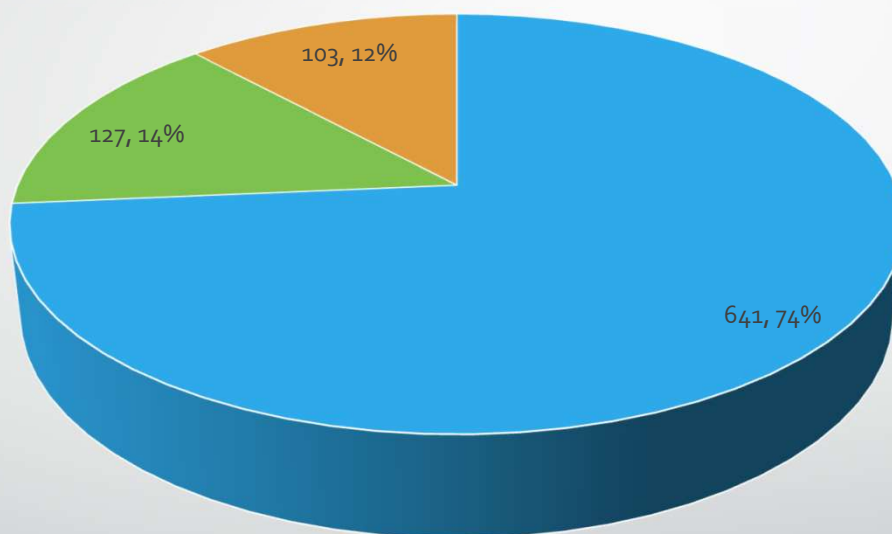
Spent on "Fruit" and "Vegetables" only

## Group 3

Predominately spent on "Dairy", "Fruit" and "Vegetables"

# Results and Insights

Customer Count

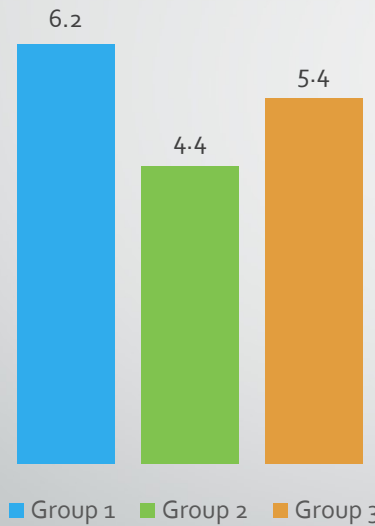


■ Group 1 ■ Group 2 ■ Group 3

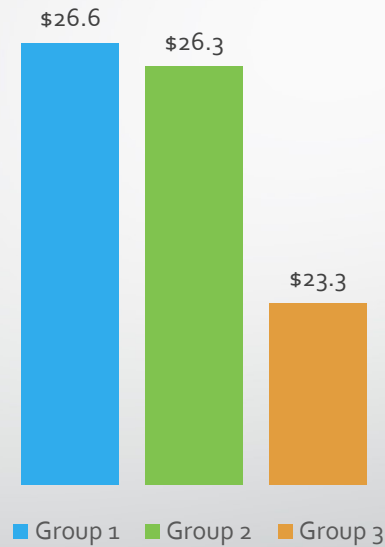


# Results and Insights

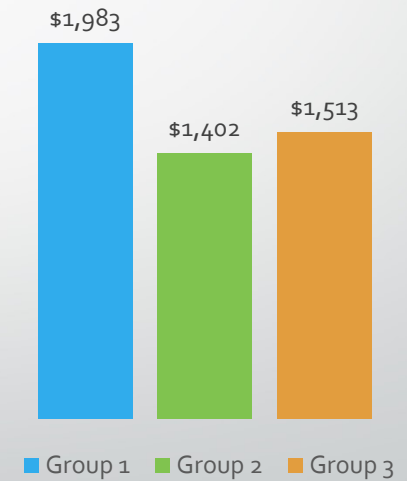
Visit Count (per month)



Average Basket



Annual Spend



# Summary

## **Analytical Result**

- Customers are grouped into three segments based on the proportions of their spend across the product areas.
- 74% of the customers are in Group 1 who have relatively balanced spend across the product categories. Those customers visit the store most frequently, resulting in the highest annual spend.

## **Insights and Recommendations**

- ABC Grocery can use this insight to customize the mail-out or catalogues. For example, for the group 2 customers which is hypothetically vegetarian shoppers, it's advisable to exclude "meat" and "dairy" products in the mail-out.

## **Next Steps**

- Further analysis on the sub-categories of spend in each shopping basket will yield additional insights on the associated products. This will help the marketing team to target the products for promotion, driving cross-sales and increase the size of shopping basket.



# Thank you!

Any questions?