



# PORTFOLIO PROJECT

## **Confectionery sales Data**

#### **PRESENTED BY**

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# **Business overview**

- Operating in New York State
- 8 Retail Outlets, 1 Warehouse, 1 Centralized HQ
- Organized into 5 distinctive Product Groups
- Monthly sales targets for each product group



#### **Scope of the study**

- Explore performance of specific outlets: Outlet 3, Outlet 5, and Outlet 8. In Month of April 2019.
- Understand sales performance.
- Analyze client distribution across generations.

#### **Stakeholders**

Project stakeholders: Sales & marketing teams

# **OBJECTIVE**

- Determine success of sales goals for outlets 3, 5, and 8.
- Identify reasons for both success and non-success.
- Uncover factors behind achievements and shortcomings.
- Study different client generations.
- Gain insights for future sales strategies.

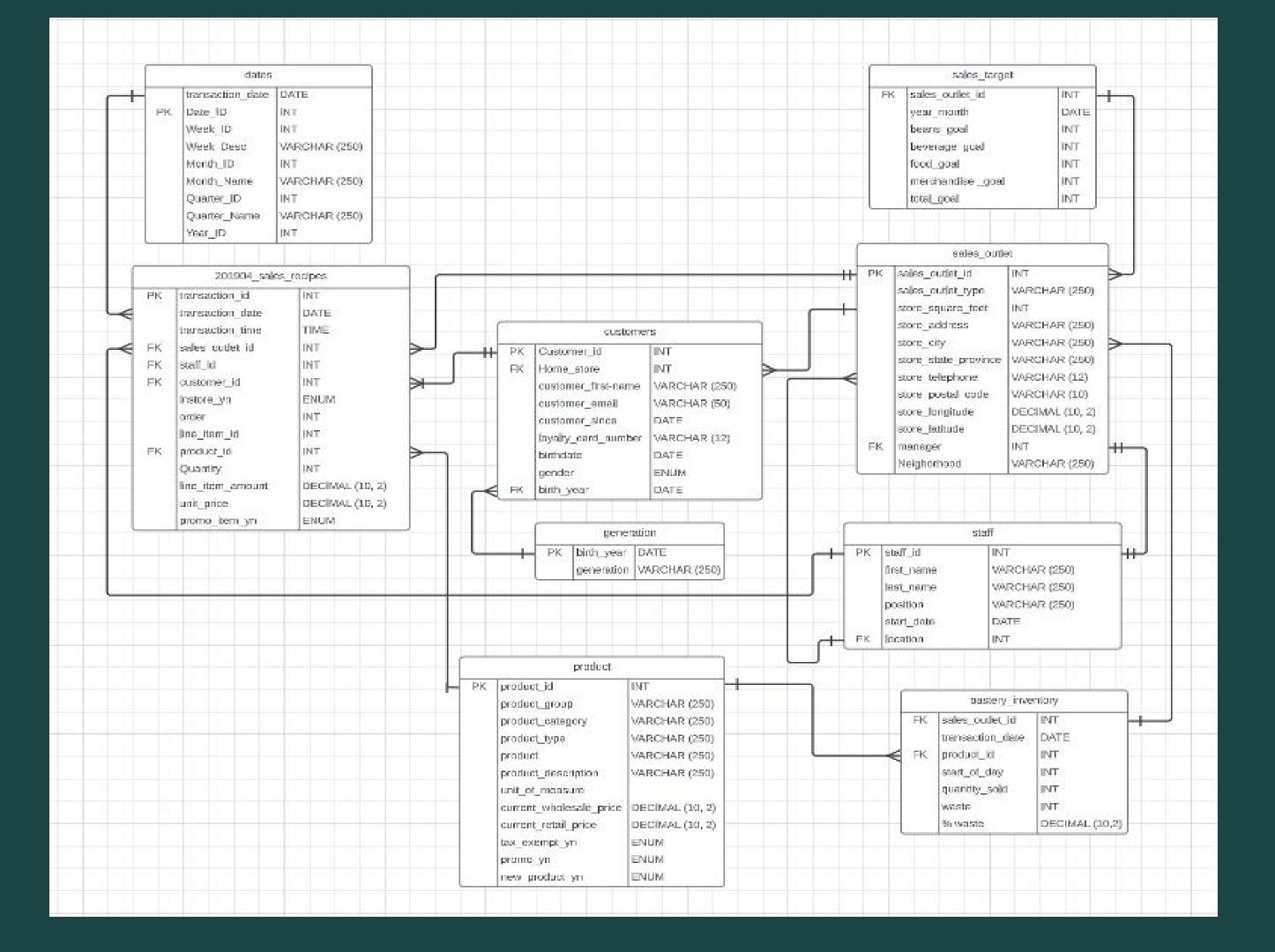
## PROBLEM STATEMENT

#### Sales Performance Analysis / Sales Target:

- 1. Which sales outlets achieved their April quantity goals?
- 2. How did each sales outlet perform in meeting monthly sales goals across product group?
- 3. What are the top 10 products consistently purchased by repeat customers?
- 4. How can repeat-purchased products be categorized, and to which groups do they belong?
- 5. Which frequently repurchased items exist in each product group, and what's their group's total product count?

#### **Client Generation Distribution:**

- 1. How were clients distributed across different generation categories in April 2019?
- 2. What are the spans of each generation category and their average yearly customer count?
- 3. What's the average count of repeat customers per generation category?



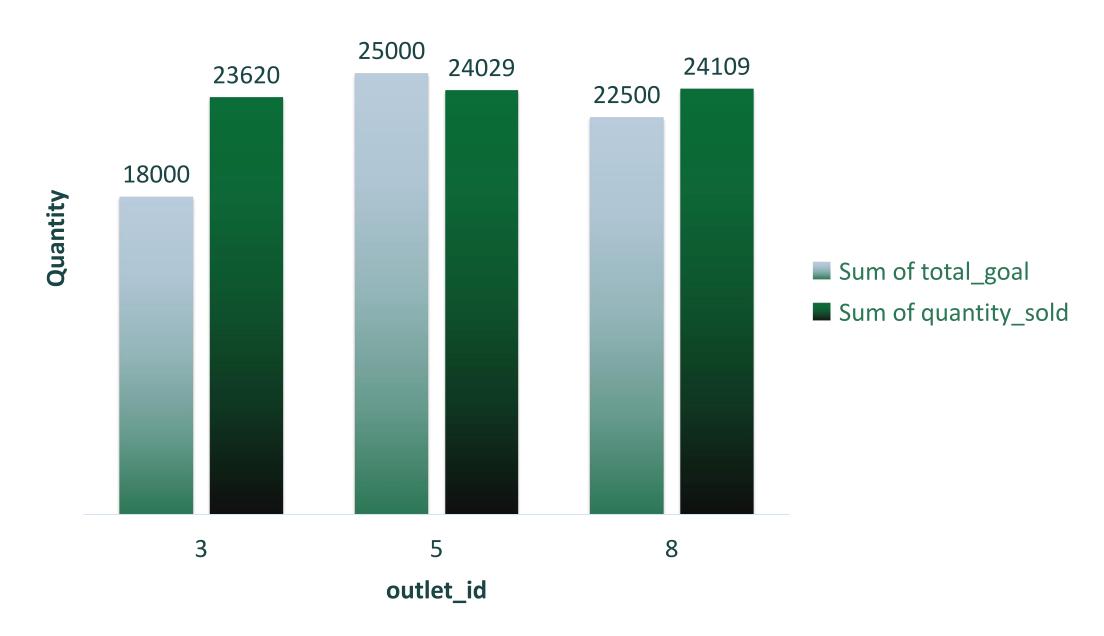
# ERD

### 1- April Quantity Goal Status Across Sales Outlets

sales outlet id	total goal	quantity sold	status
3	18000	23620	achieved
5	25000	124029	not- achieved
8	22500	24109	achieved

Outlet 3 and Outlet 8 successfully achieved their quantity goals, while Outlet 5 did not meet its goal.

#### **Comparison Of Sales Goal And Quantity Sold**



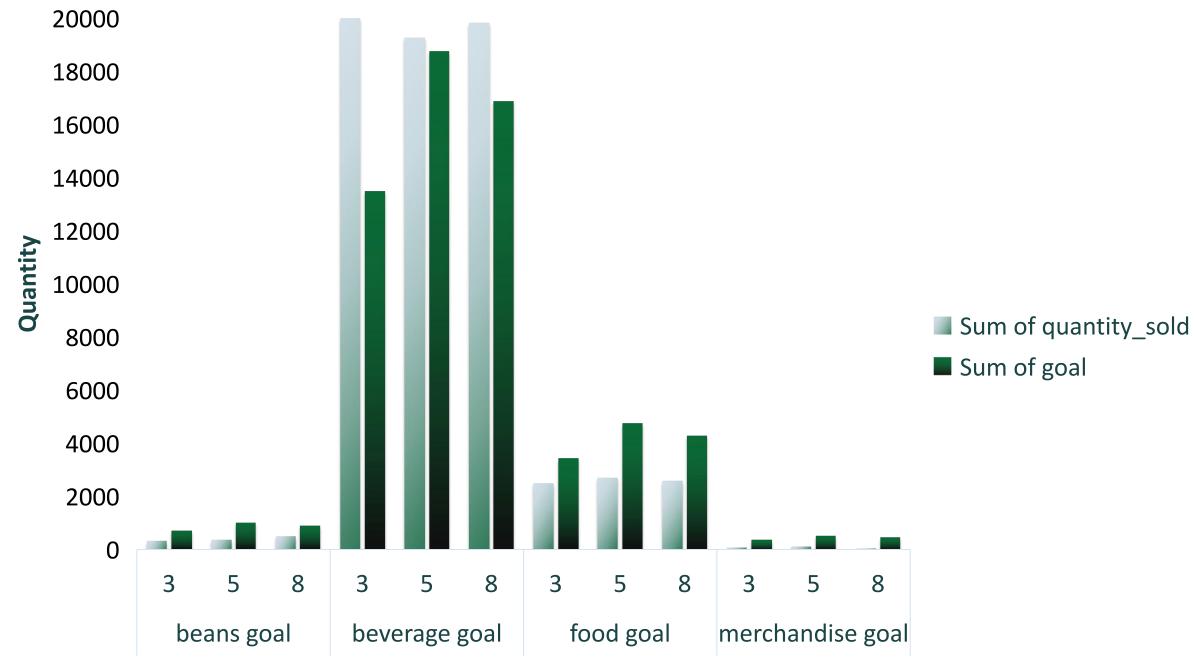
# 2- April Quantity Goal Status Across Sales Outlets For Each Product Group

Sales_outlet_id	Product group	Goal	Quantity_sold	Status
3	beans goal	720	313	Not-achieved
3	beverage goal	13500	20001	Achieved
3	food goal	3420	2489	Not-achieved
3	merchandise goal	360	94	Not-achieved
5	beans goal	1000	362	Not-achieved
5	beverage goal	18750	19282	Achieved
5	food goal	4750	2694	Not-achieved
5	merchandise goal	500	125	Not-achieved
8	beans goal	900	493	Not-achieved
8	beverage goal	16875	19822	Achieved
8	food goal	4275	2581	Not-achieved
8	merchandise goal	450	36	Not-achieved

#### 2-April Quantity Goal Status Across Sales Outlets For Each Product Group

- Beverage product group is the solo achiever of its quantity sold across all sales outlets.
- other product group have fallen short of their targets.

# Comparison of Sales Goal And Quantity Sold by product Group

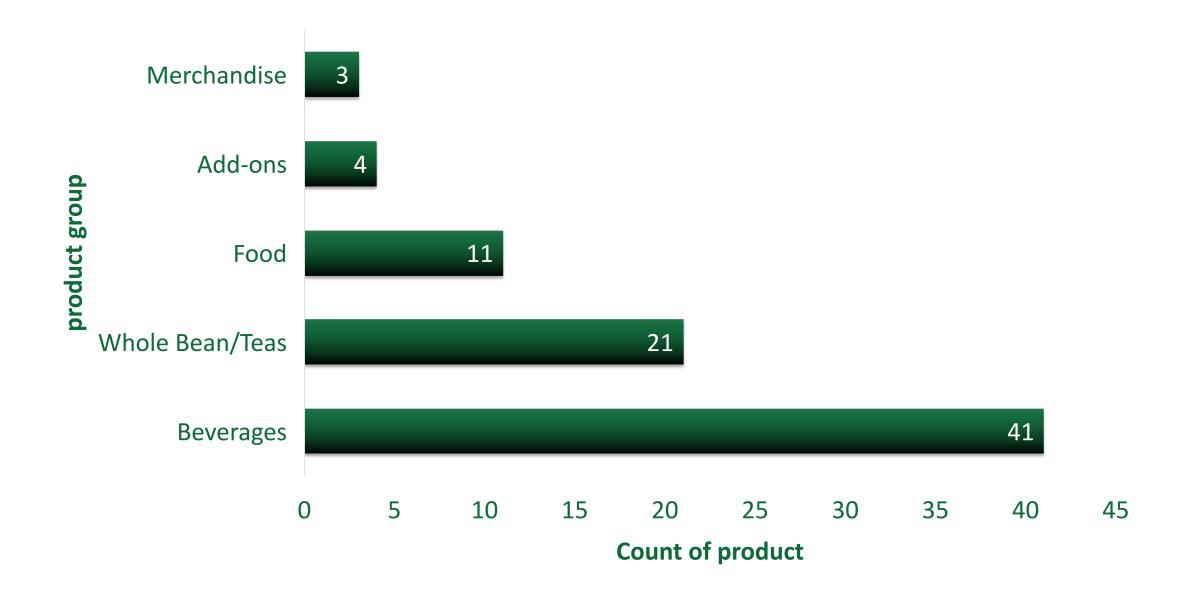


Product group with each sales outlet id

# 3- Count of Products Purchased by Repeat Customers, Segmented by Product Groups

# Count of product purchased by repeated customer in each product group

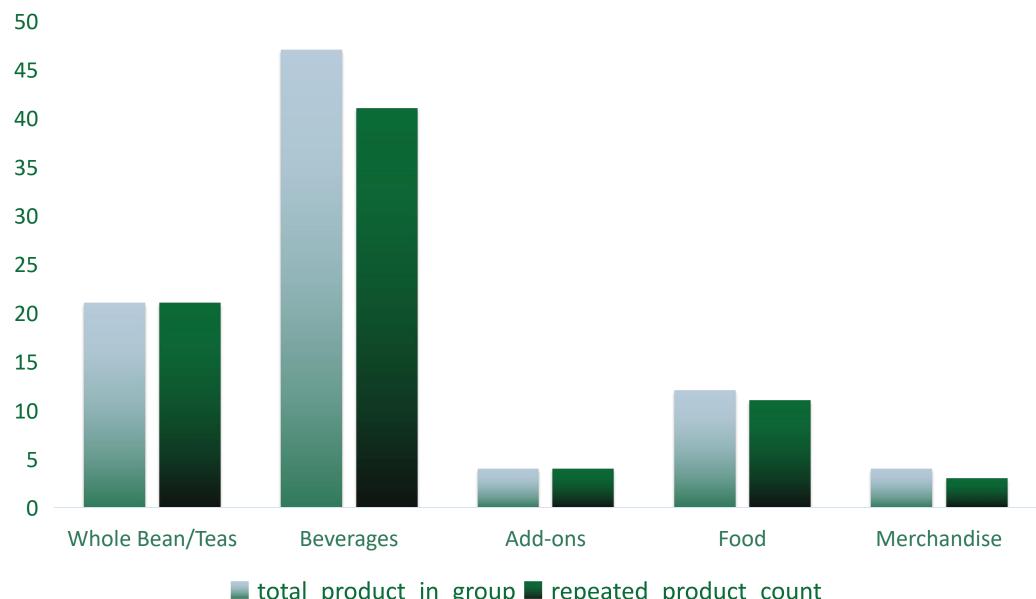
Product_group	Count of product
Beverages	41
Whole Bean/Teas	21
Food	11
Add-ons	4
Merchandise	3



## 4- Count of Products Purchased by Repeat Customers, Segmented **by Product Groups**

Product group	Total product in group	Count of products purchased by repeated customers
Whole Bean/Teas	21	21
Beverages	47	41
Add-ons	4	4
Food	12	11
Merchandise	4	3

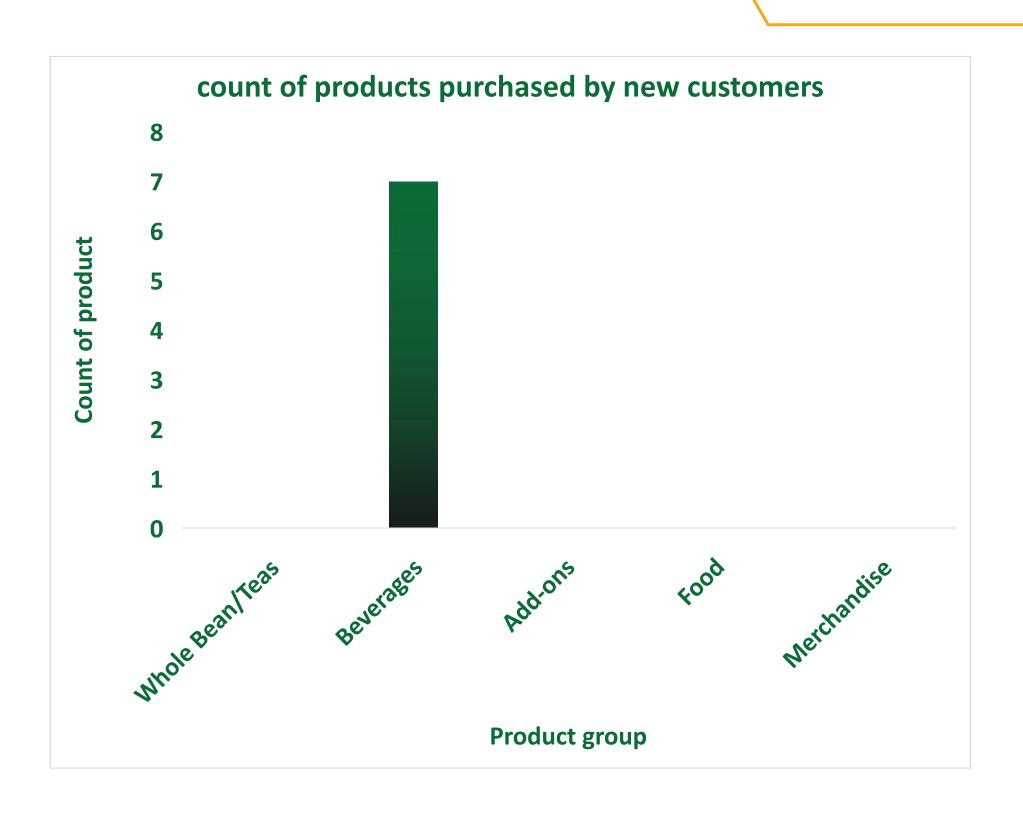
#### **Total product vs Count of product purchase by repeated** customer



total\_product\_in\_group = repeated\_product\_count

# 5- Count of Products Purchased by new Customers, Segmented by Product Groups

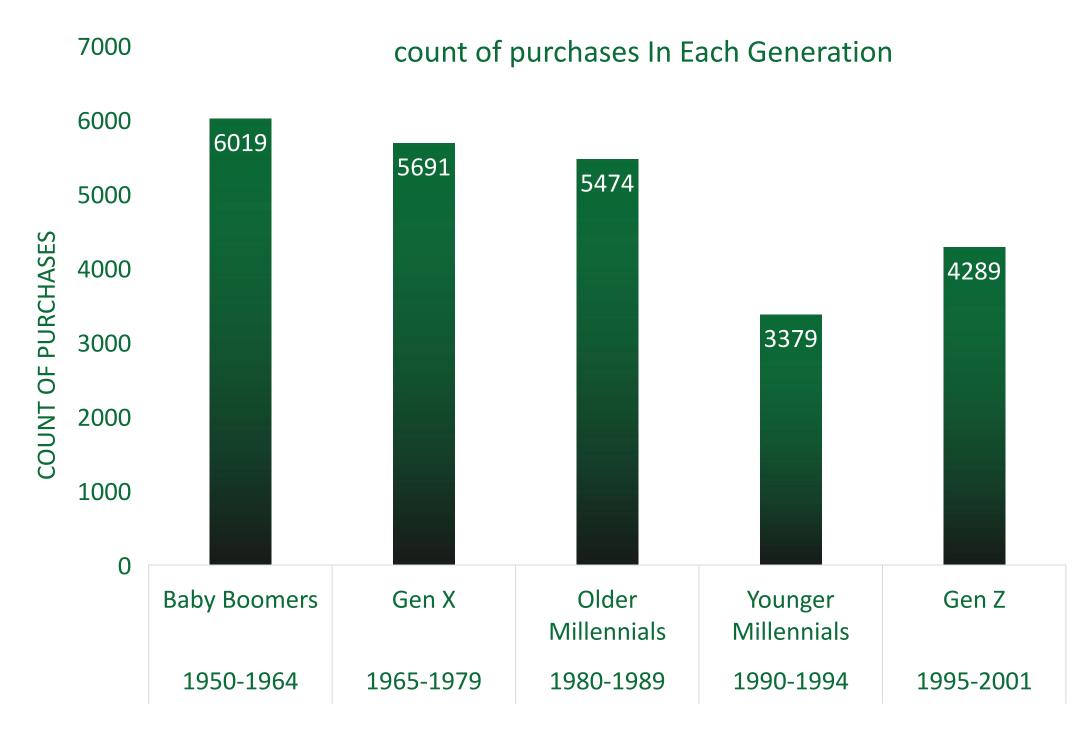
product_group	count of products purchased by new customers
Whole Bean/Teas	0
Beverages	7
Add-ons	0
Food	0
Merchandise	0



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## 6- Distribution of Customer purchases Across Different Generation Categories in April 2019

year_range	generation	count of purchases
1950-1964	Baby Boomers	6019
1965-1979	Gen X	5691
1980-1989	Older Millennial	s 5474
1990-1994	Younger Millennials	3379
1995-2001	Gen Z	4289

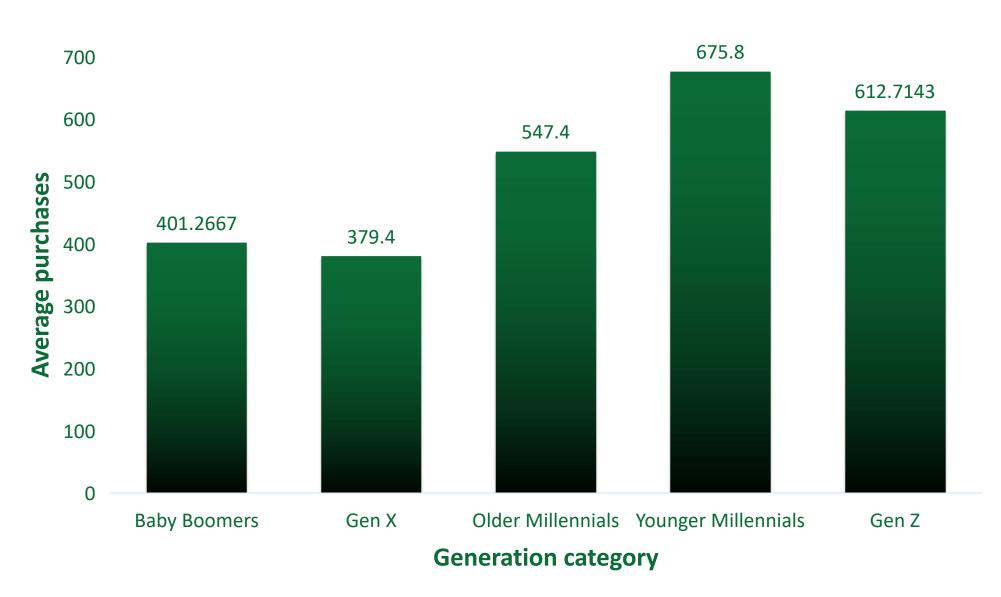


GENERATION CATEGORY AND UNEQUAL CLASS INTERVAL

## 7- Count of avg purchases by customers within each generation category

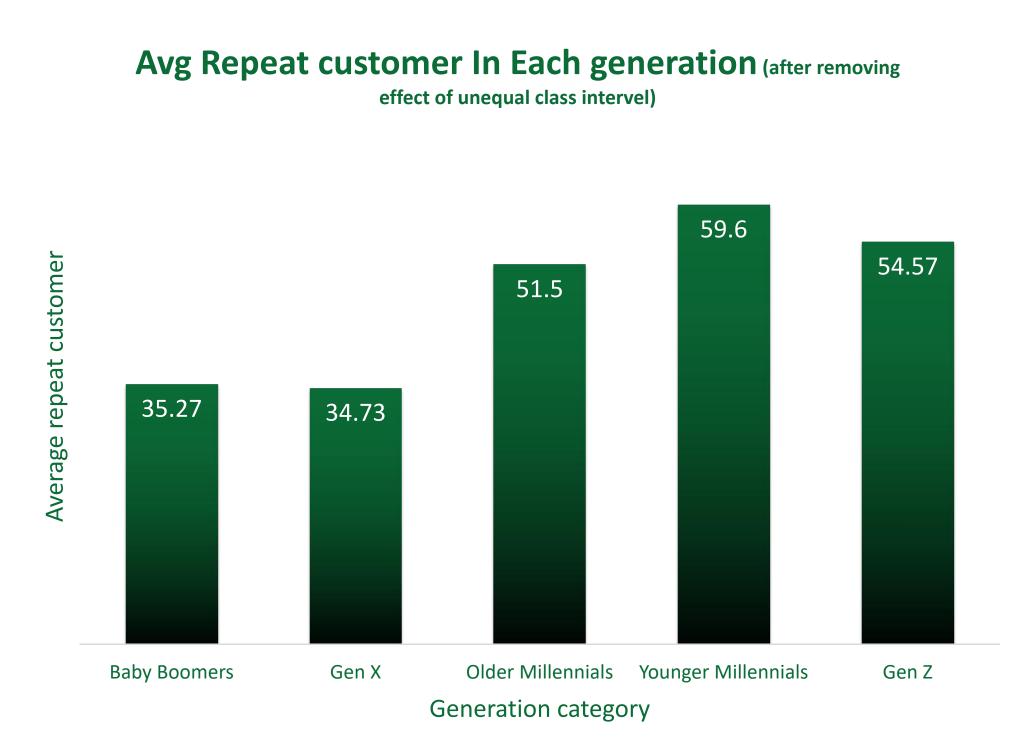
year range	span years	generation	Count of purchase	average purchases
1950-1964	15	Baby Boomers	6019	401.2667
1965-1979	15	Gen X	5691	379.4
1980-1989	10	Older Millennials	5474	547.4
1990-1994	5	Younger Millennials	3379	675.8
1995-2001	7	Gen Z	4289	612.7143

# Average purchases In Each Generation (after removing effect of unequal class intervel)



# 8- Avg Repeat customer In Each generation (after removing effect of unequal class intervel)

year range	span years	generation	no of customer	avg no of customer
1950-1964	15	Baby Boomers	529	35.27
1965-1979	15	Gen X	521	34.73
1980-1989	10	Older Millennials	515	51.5
1990-1994	5	Younger Millennials	298	59.6
1995-2001	7	Gen Z	382	54.57



# RECOMENDATION

#### **Sales Outlets Goal Achievement Analysis:**

• Outlet 3 and 8 achieved their goals, while 8 didn't.

#### Further analysis uncovers a key insight.

- Success traced back to exceptional beverage group performance.
- This success overshadowed weaker performance in other product groups.

#### **Strategic Steps for Improvement:**

- Suggest more ambitious targets for the beverage group due to its success.
- Emphasize the need to explore underperformance reasons in other product groups.
- Uncover insights to address weaknesses and achieve balanced growth.

# RECOMENDATION

#### **Generation Category Distribution Analysis:**

- Currently most customers belong to the Baby Boomer generation.
- Attributed to the class interval of Baby Boomer category.

#### Equalized class intervals reveal customer distribution.

- Young Millennials and Gen Z show significant customer numbers.
- Strong probability of Gen Z market size growth in the future.
- Anticipate a decline in the Baby Boomer market.

#### **Strategic Steps for Improvement:**

- Focus on future growth potential.
- Highlight 'Gen Z' as a key market.
- Emphasize their growing market size and purchasing power.
- Suggest fostering brand loyalty through effective promotions.

# RECOMENDATION

- Recommend student-friendly deals and product trials.
- Stress the importance of strategic decisions aligned with company goals