

Zalo

# PROJECT PRESENTATION

CUSTOMER ANALYTICS - RETAIL DATASET

DAT TRUONG

# I AM PRESENTING ...

1 - HOW I PLAN FOR THE PROJECT?

2 - HOW I WORK ON THE PROJECT?

3 - THE OUTPUT OF THE PROJECT



## CONTEXT

- Select a dataset on the Internet and conduct an analysis
- Duration 7 days
- Available 3.5 days
- Actual 4.5 days

## EXPECTED OUTPUT

- 5 types of chart
- 3 insights

# AUDIENCE'S EXPECTATION ANALYTICS MANAGER

01

## BUSINESS ACUMEN

Understand business  
operation and  
stakeholders' expectation

02

## TECHNICAL SKILL

Data manipulation and  
visualization

03

## ANALYTICAL THINKING

Recognize insights and  
presentation

# OBJECTIVES

## SENIOR DATA ANALYST

01

### BUSINESS ACUMEN

Understand business  
strategy / performance ->  
Over time (years)

02

### TECHNICAL SKILL

Matplotlib, Seaborn, and  
Plotly

03

### ANALYTICAL THINKING

Advanced analytics

# TIME MANAGEMENT

DAY 1

Scan 3 datasets  
Quickly check  
using Power BI

DAY 2

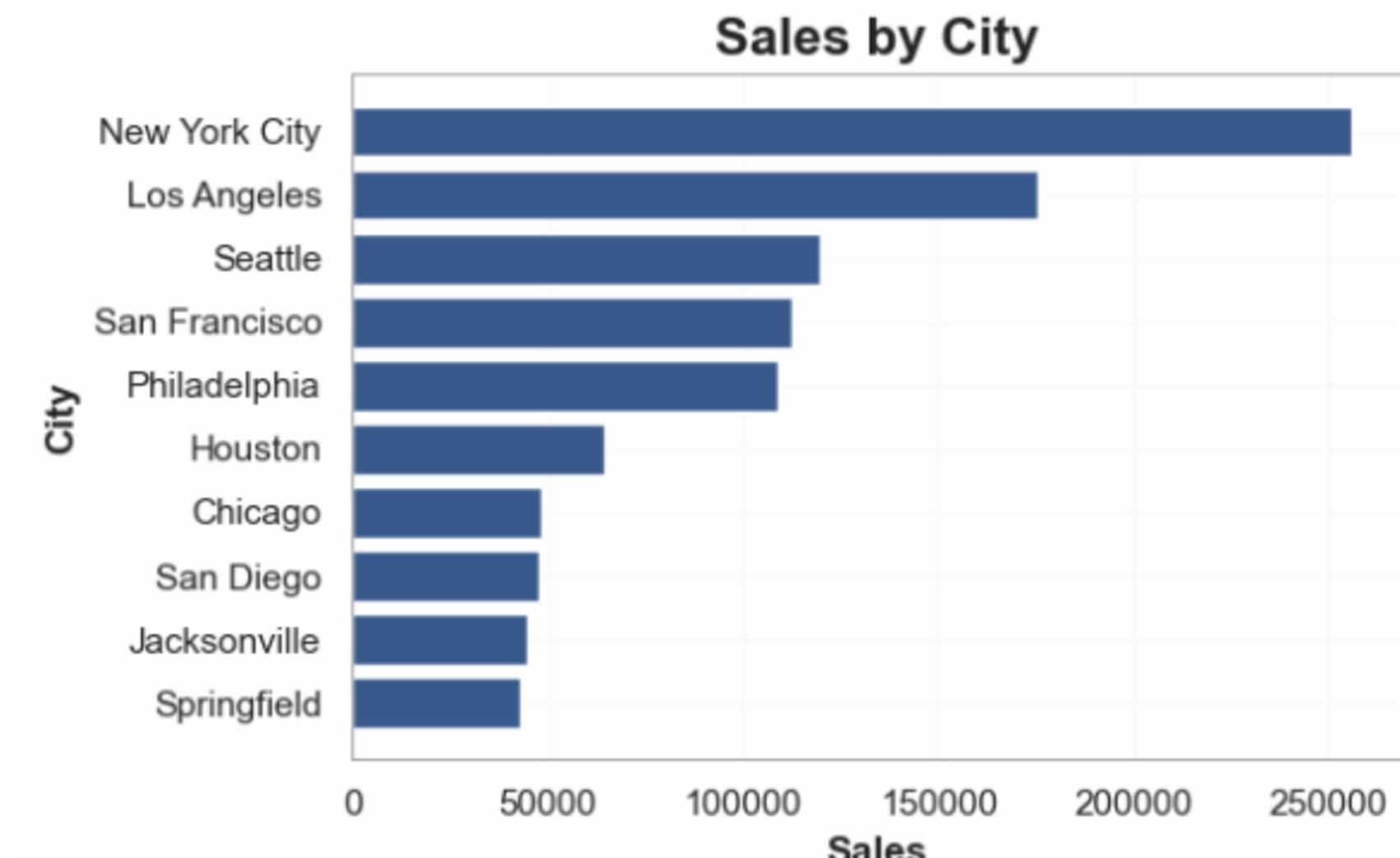
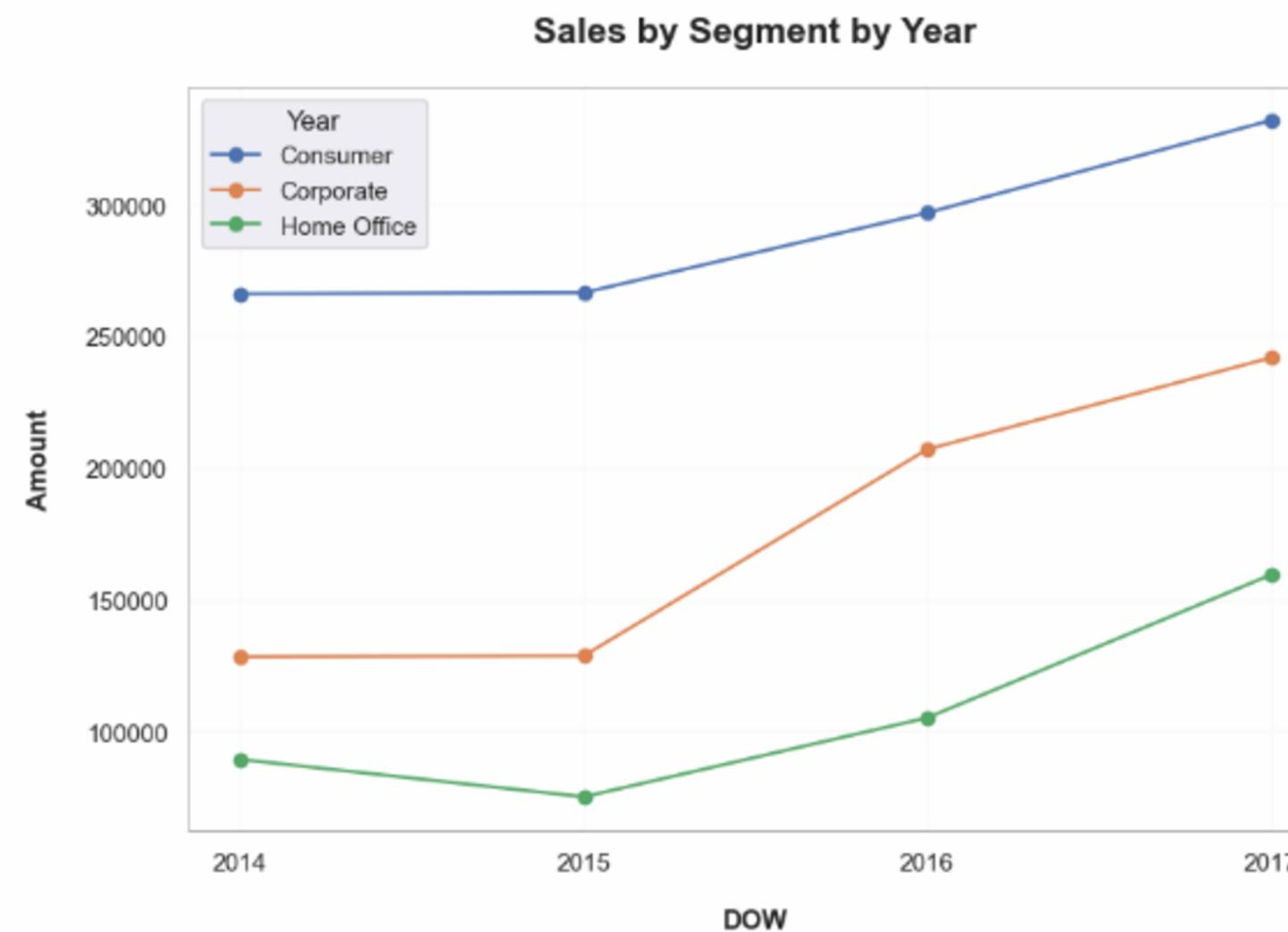
Write code  
Prioritize the manipulation,  
calculations and chart framing

DAY 3

Make chart more  
eye-catching  
Write report

DAY 4

# DIVERSE CHART TYPES

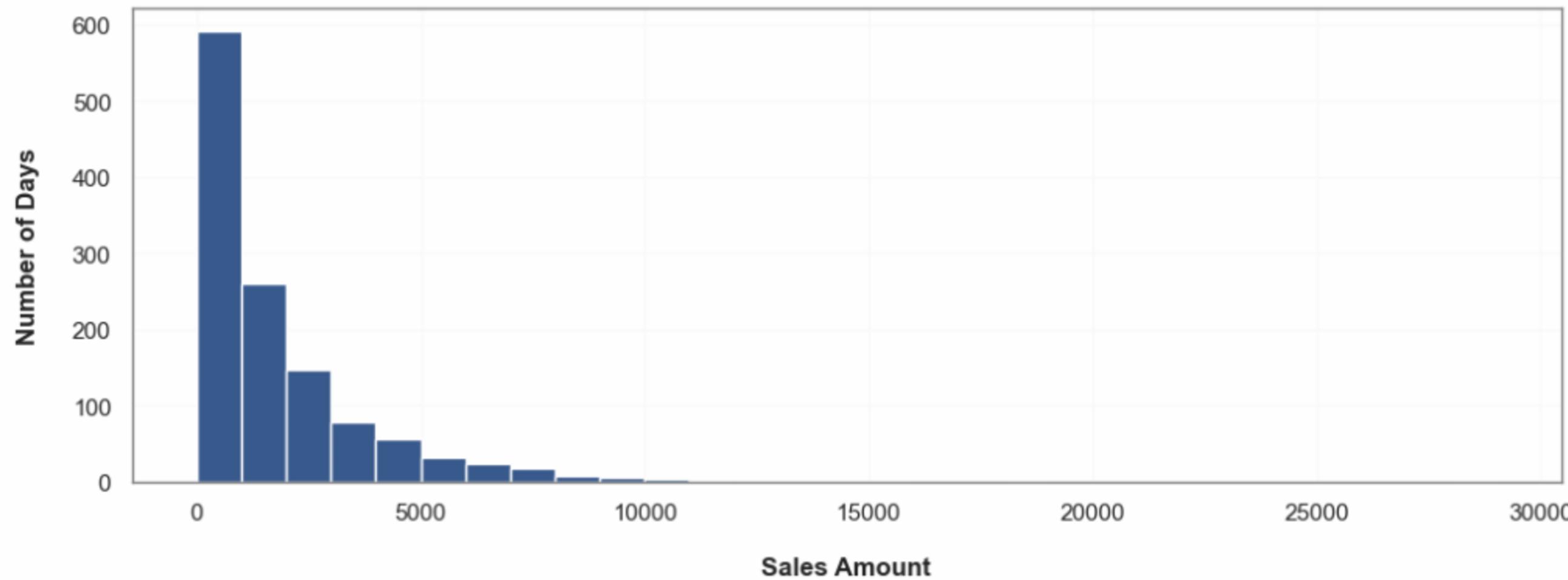


**LINE CHART**

**BAR CHART**

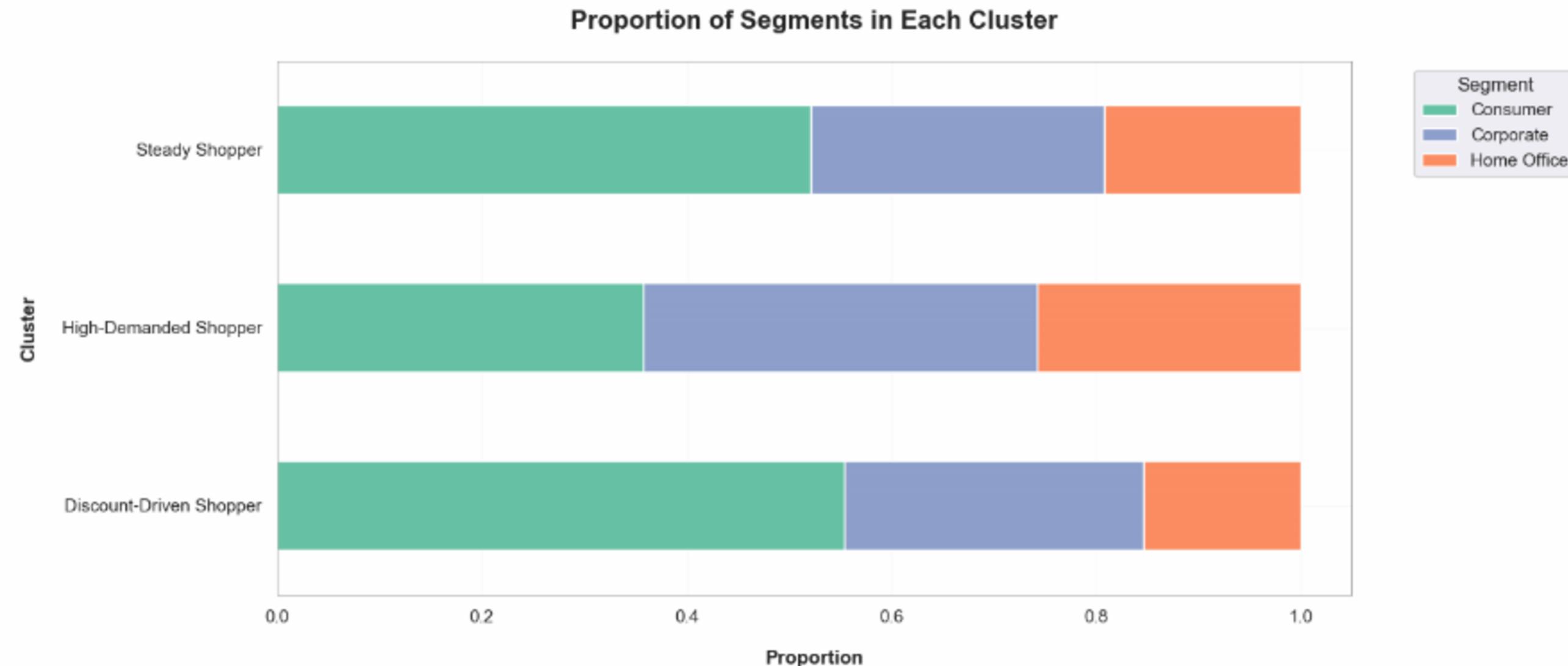
# DIVERSE CHART TYPES

**Histogram of Daily Sales**



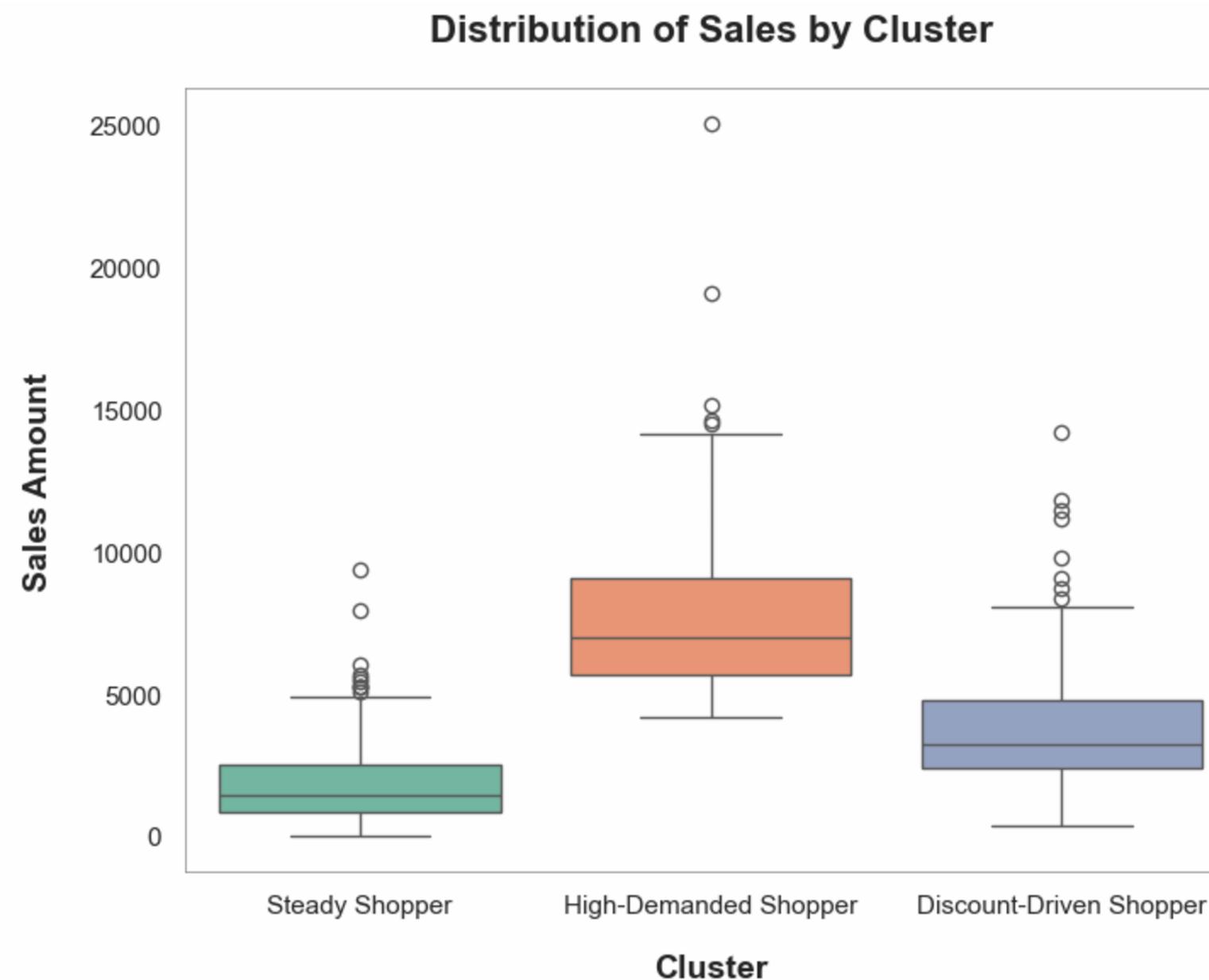
## HISTOGRAM

# DIVERSE CHART TYPES

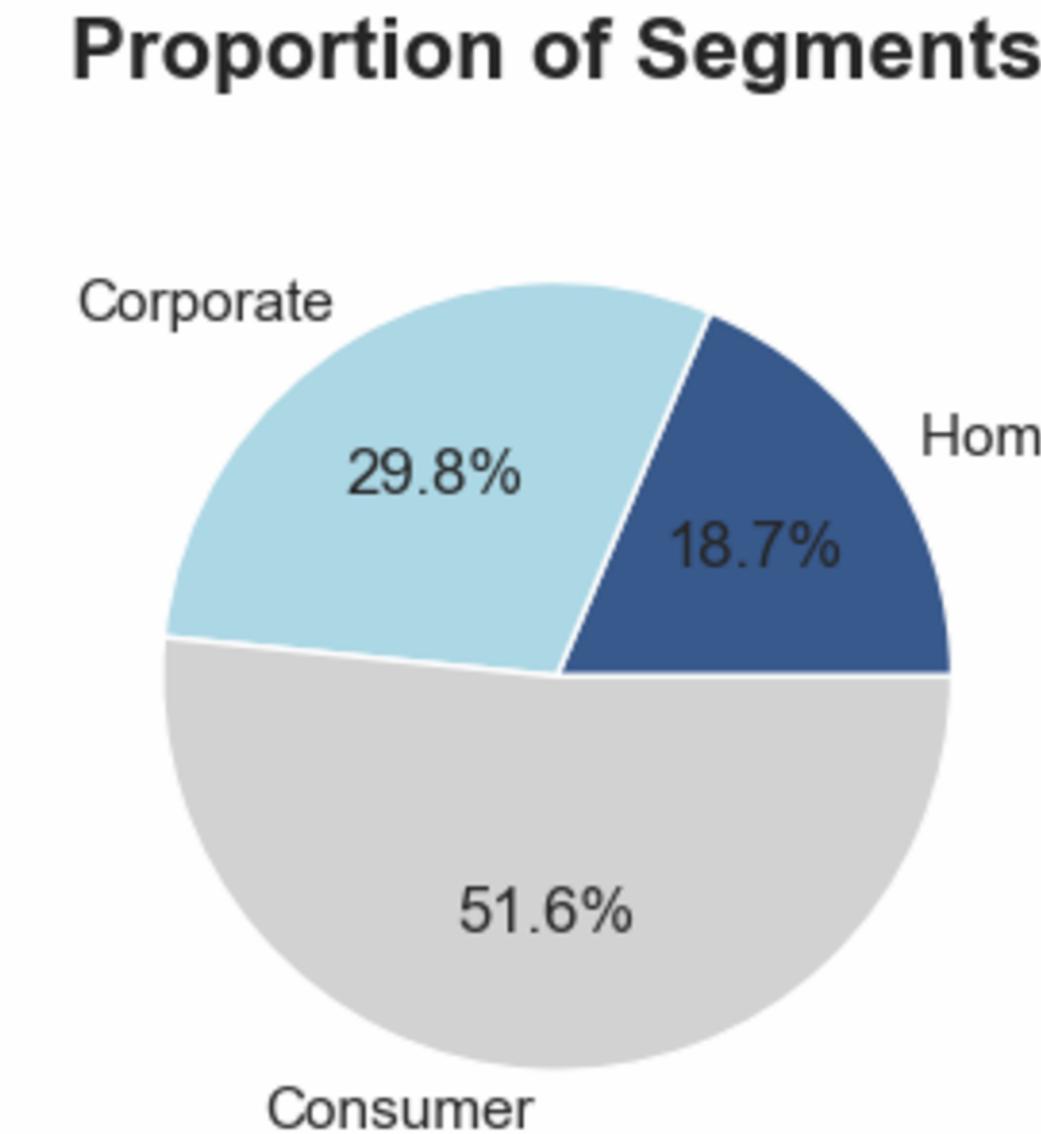


## 100% STACKED BAR CHART

# DIVERSE CHART TYPES

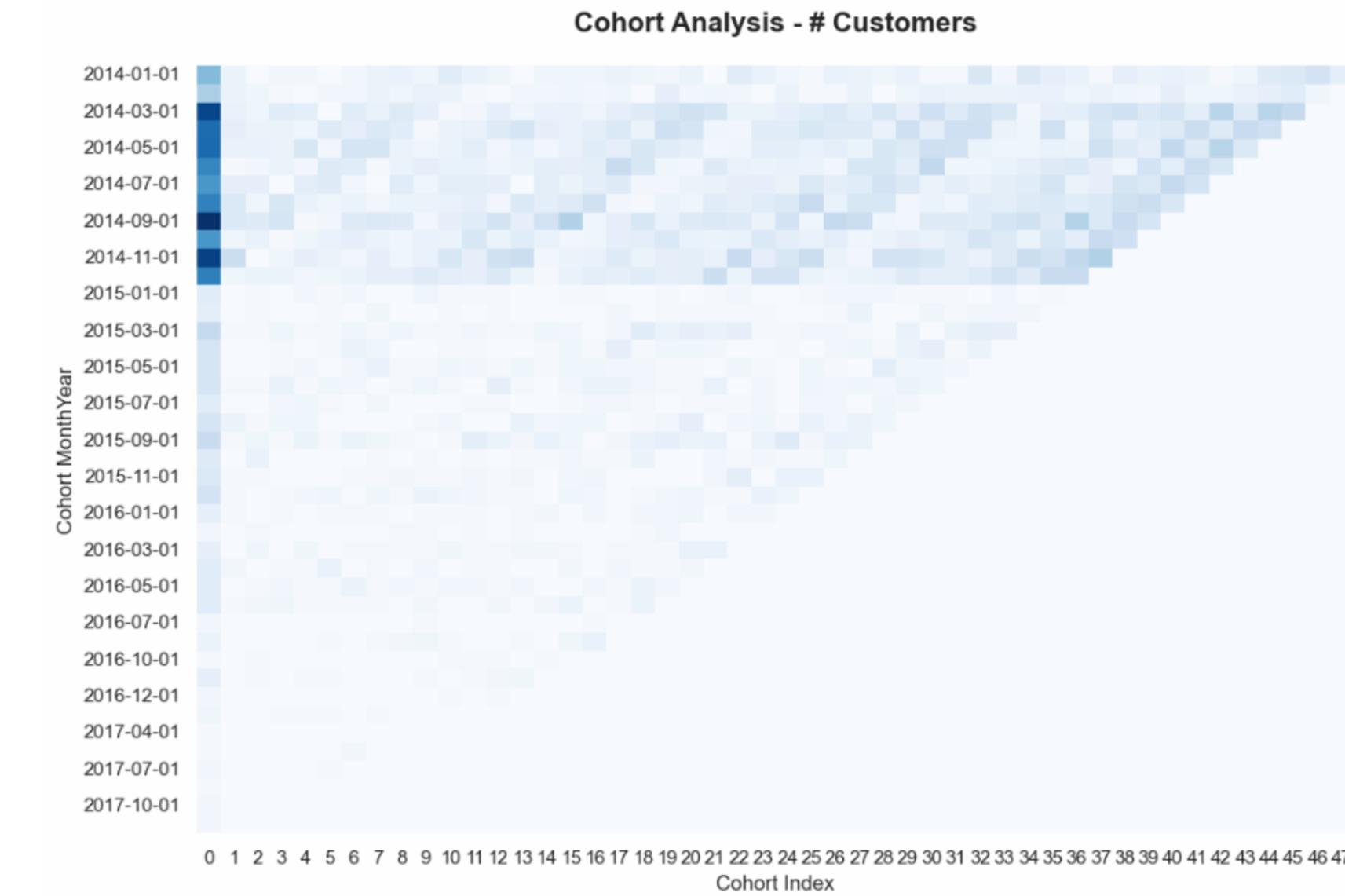
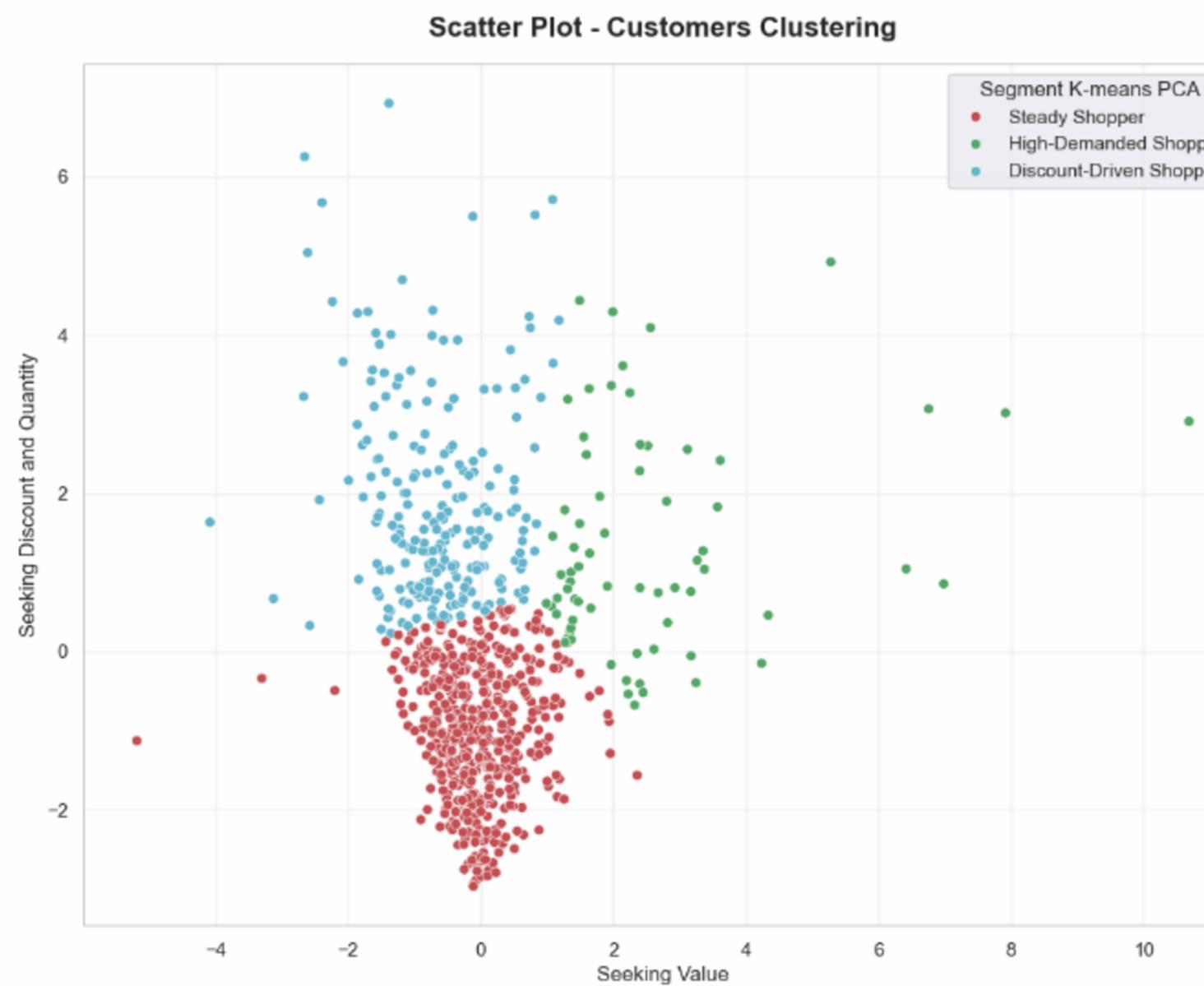


**BOX PLOT**



**PIE CHART**

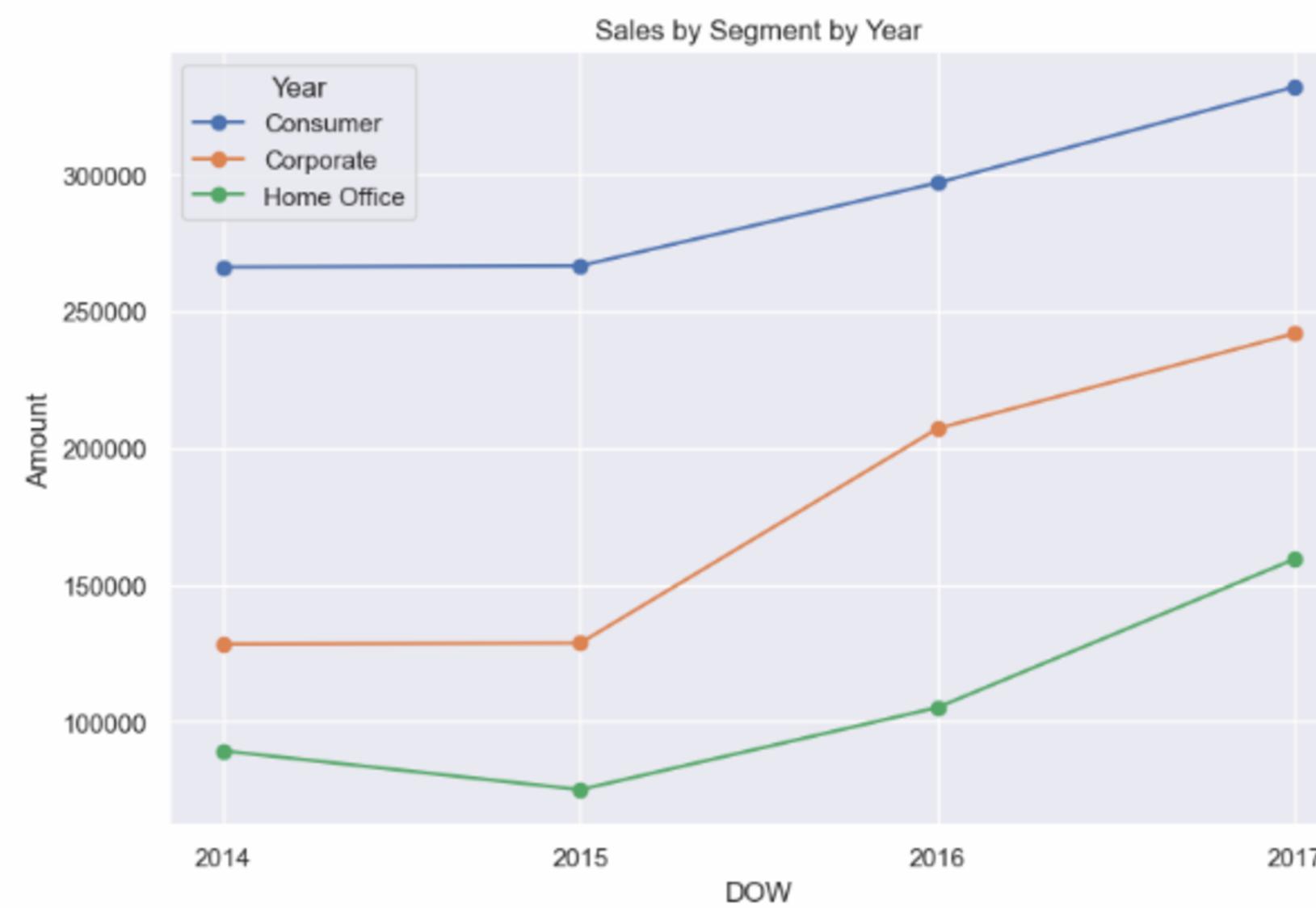
# DIVERSE CHART TYPES



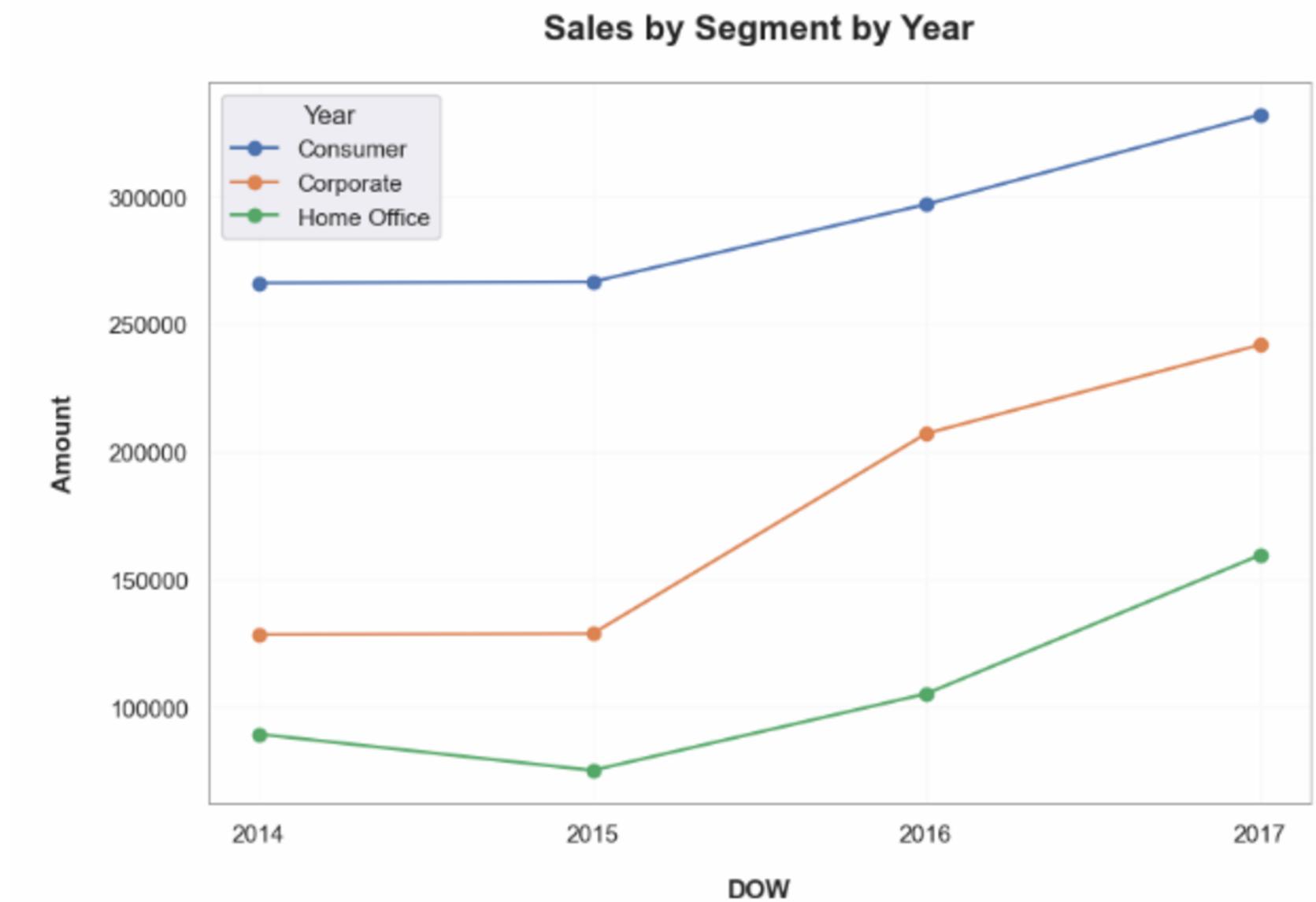
## SCATTER PLOT

## HEAT MAP

# MAKE CHARTS EYE-CATCHING



DEFAULT



ADJUSTED

# ACTIONABLE INSIGHTS

01

## CUSTOMER CLUSTERING

- **Steady Shopper (63%)** They buy small quantities and don't prefer discounts. Due to their majority in customer base, they help maintain good consumption and cash flow, even though they don't bring much profit to the company
- **Discount-Driven Shopper (28%)** They buy a lot of products, due to discounts offered. That's why the profit from them is relatively low, although they contribute moderate level of sales
- **High-Demanded Shopper (9%)** They only buy demanded products and have an aversion to discounts, that's why they contribute a large amount of sales and profit.

# ACTIONABLE INSIGHTS

01

## FEASIBLE ACTION

- If in the incoming quarter, the company aims at increase **profit**, the **High-Demanded Shopper** segment should be focused on, considering Exclusive Benefits, such as: early product information, or priority shipping and customer service
- If the **sales** is paid attention to, the company should encourage the **Discount-Driven Shopper** group, by offering unique sale-off program
- The company also can examine the elasticity of the sales to the discounts, at the **Discount-Driven Shopper** group, by conducting an AB test with online purchases, or pre/post test with in-store visits.

# ACTIONABLE INSIGHTS

02

## CUSTOMER BEHAVIOR

- The company focuses on retaining customers
- The 1st-year customers are the majority of customer base over years
- Despite the small quantity, the 3rd-year customers have a high intention to repeat purchases

## FEASIBLE ACTION

- To maintain relationship with 1st-year customers, considering the emotional marketing approaches, such as Voice of Community, Brand Representation, ...
- To nurture 3rd-year customers - encourage repeated purchases, considering distinct treatment among customer clusters, as mentioned

# ACTIONABLE INSIGHTS

03

## MARKET BASKET

- The assortment of items that have been purchased together

## FEASIBLE ACTION

- Product Placement and Store Layout
- Cross-Selling and Up-Selling
- Product Development

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THANK YOU

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