



# Customer Shopping Behavior — Summary

Analysis of 3,900 purchases to uncover spending, segments, product preferences, and subscription patterns.

# Dataset Snapshot

## Rows & Columns

3,900 rows · 18 columns

## Key Features

Demographics,  
purchase details,  
behavior, shipping

## Missing Data

37 missing review  
ratings

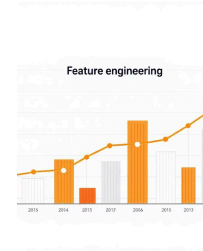
# EDA & Preparation (Python)



Load & Inspect  
`df.info()` and `.describe()`

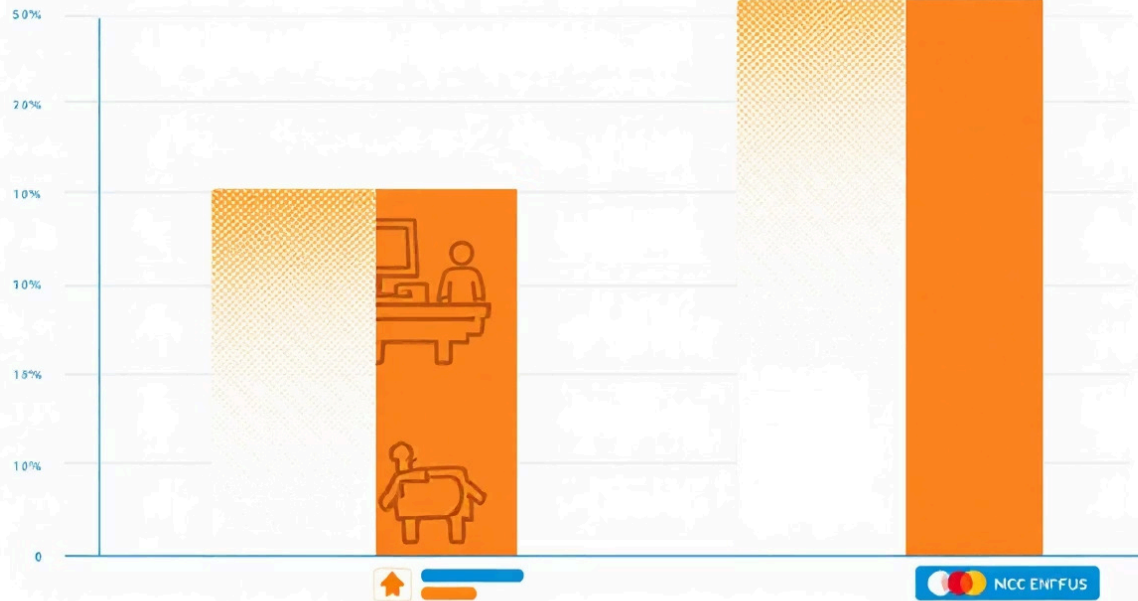


Missing Values  
Imputed Review Rating by  
category median



Feature Engineering  
`age_group`,  
`purchase_frequency_days`

# SQL Analysis — Revenue & Behavior



## Revenue by Gender

Male: 157,890 · Female: 75,191

## Subscribers vs Non

Subscribers: 1,053 customers · Avg spend \$59.49 · Revenue \$62,645

Non-subscribers: 2,847 customers · Avg \$59.87 · Revenue \$170,436



# Discounts & High-Spenders

## High-Spending Discount Users

839 rows identified —  
customers using discounts but  
spending above average

## Discount-Dependent Products

Top: Hat 50% · Sneakers  
49.66% · Coat 49.07% · Sweater  
48.17% · Pants 47.37%

# Top Rated Products



Gloves

Avg rating 3.86



Sandals

Avg rating 3.84



Boots

Avg rating 3.82



Hat

Avg rating 3.80



Skirt

Avg rating 3.78



# Shipping & Spend



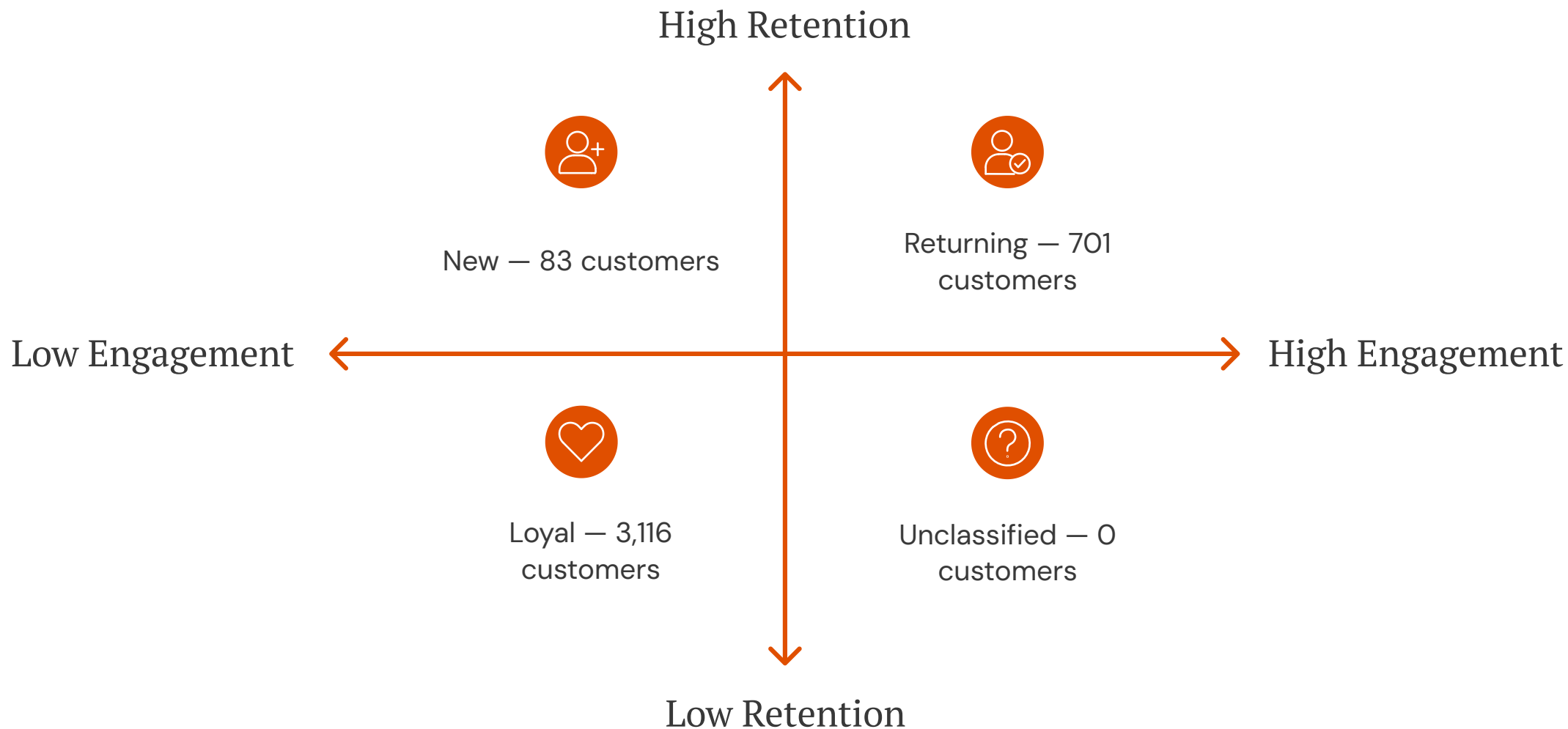
## Average Purchase Amount

Standard: \$58.46 · Express: \$60.48

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## Shipping Types

Free Shipping, Standard, Express, 2-Day,  
Next Day, Store Pickup



Segmentation reveals majority are Loyal (3,116); small New cohort (83).

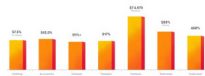


# Dashboard Highlights (Power BI)



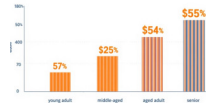
## Subscription Snapshot

Yes 27% · No 73%



## Revenue by Category

Clothing 100K ·  
Accessories 75K ·  
Footwear 30K · Outerwear 20K



## Revenue by Age Group

Young Adult 50K · Middle-aged 45K · Adult 40K · Senior 35K

# Business Recommendations

1

## Boost Subscriptions

Promote exclusive subscriber benefits

2

## Loyalty Programs

Reward repeat buyers to increase loyalty

3

## Review Discount Policy

Balance sales lift with margin control

4

## Product Positioning

Highlight top-rated & best-selling items

5

## Targeted Marketing

Focus on high-revenue age groups & express-shipping users