



# Customer Shopping Behavior Analysis

Uncovering insights from 3,900 purchases to drive strategic business decisions

# Dataset Overview

3,900

**Total Purchases**

Transactions  
analyzed

18

**Data Points**

Features per  
transaction

50

**Locations**

Geographic coverage

25

**Products**

Unique items  
tracked

Comprehensive dataset spanning demographics, purchase details,  
and shopping behavior across multiple dimensions



64.

Made with GAMMA



# Data Preparation Journey

01

## Data Loading & Exploration

Imported dataset, analyzed structure and summary statistics

02

## Missing Data Handling

Imputed 37 missing review ratings using category medians

03

## Feature Engineering

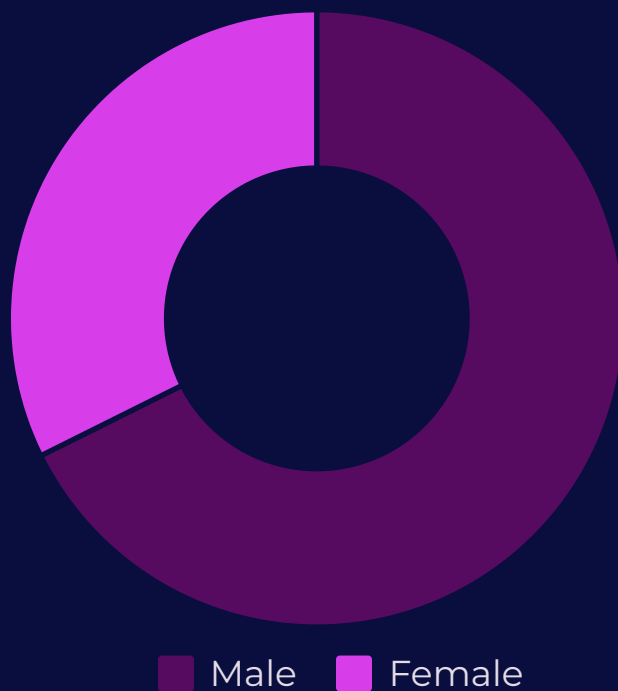
Created age groups and purchase frequency metrics

04

## Database Integration

Connected to PostgreSQL for advanced SQL analysis

# Revenue by Gender

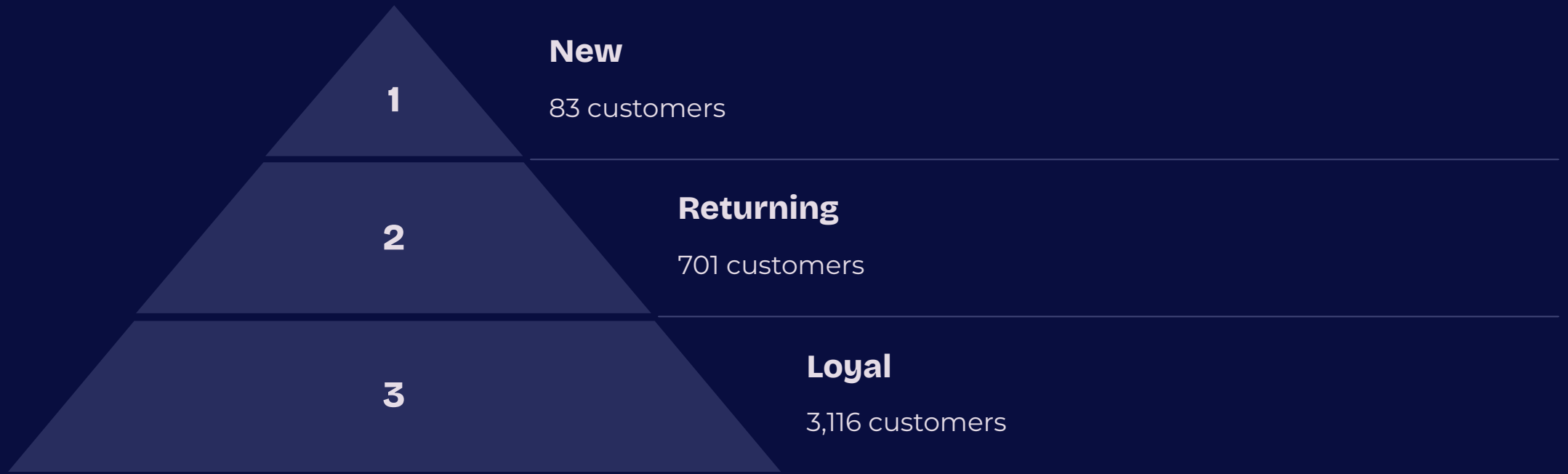


## Key Insight

Male customers generate **68% of total revenue**, significantly outpacing female customers

Strategic opportunity for targeted marketing campaigns

# Customer Segmentation



**80% of customers are loyal** – retention strategies are working, but growth opportunities exist in converting new buyers

# Top Performing Products

## Gloves

Rating: **3.86**

## Sandals

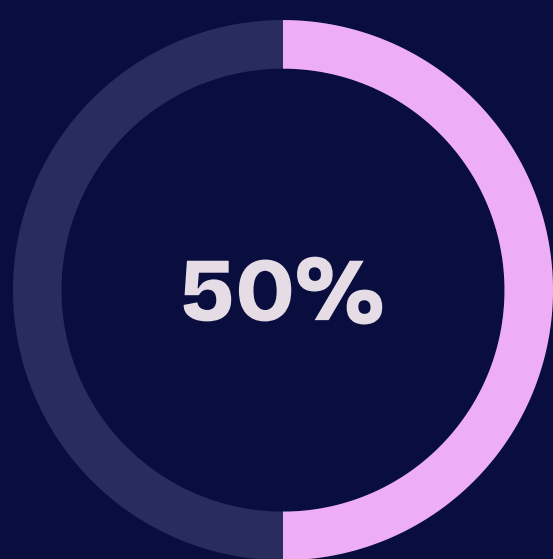
Rating: **3.84**

## Boots

Rating: **3.82**

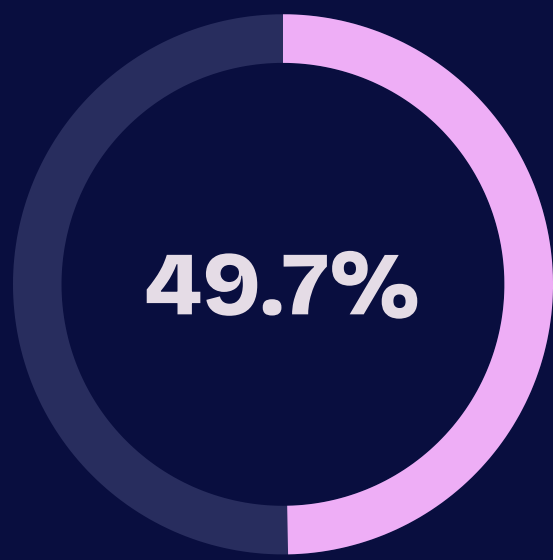
Highest-rated products show consistent quality across accessories and footwear categories

# Discount Impact Analysis



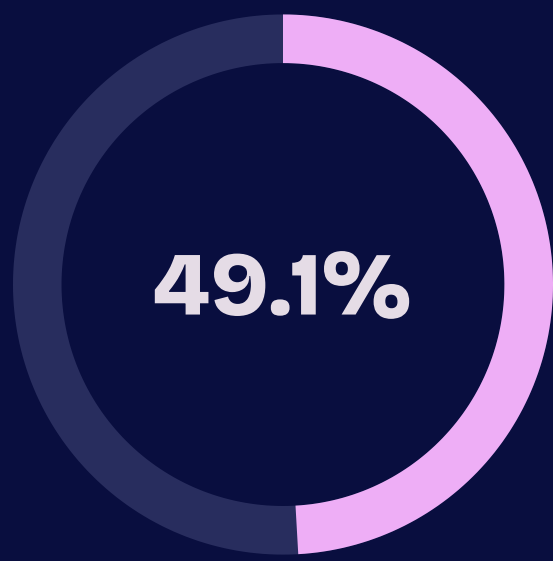
Hats

Highest discount rate



Sneakers

Second highest



Coats

Third highest

## Smart Spenders

**839 customers** used discounts but still spent above average

Discount strategy drives volume without sacrificing quality buyers



# Subscription vs Non-Subscription

## Subscribers

1,053 customers

Avg spend: **\$59.49**

Total revenue: **\$62,645**

## Non-Subscribers

2,847 customers

Avg spend: **\$59.87**

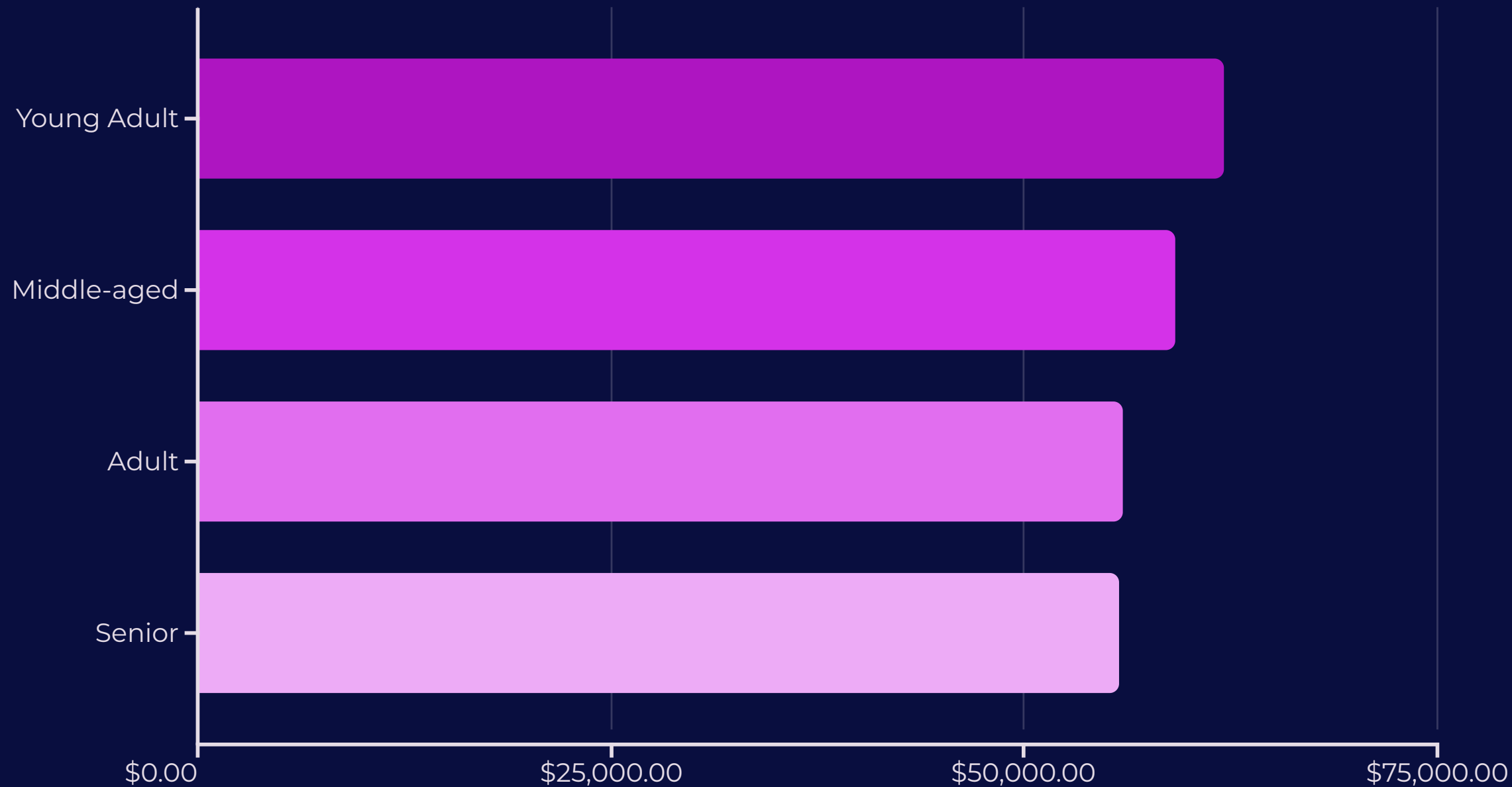
Total revenue: **\$170,436**

Similar spending patterns, but **73% of customers are non-subscribers**  
– major growth opportunity





# Revenue by Age Group



Young adults lead revenue generation, but all segments show balanced contribution

# Strategic Recommendations

1

## Boost Subscriptions

Promote exclusive benefits to convert 73% non-subscriber base

2

## Loyalty Programs

Reward repeat buyers to strengthen the 80% loyal customer segment

3

## Optimize Discounts

Balance promotional strategy with margin control across high-discount products

4

## Product Positioning

Highlight top-rated items like gloves and sandals in marketing campaigns

5

## Targeted Marketing

Focus on high-revenue demographics and express shipping preferences