

# Customer Shopping Behavior Analysis

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





DATASET OVERVIEW

# The Foundation

**3,900**

## Total Purchases

Transactions analyzed across all categories

**18**

## Data Points

Features per customer transaction

**50**

## Locations

Geographic coverage

**25**

## Products

Unique items tracked



PYTHON

# Data Preparation & Cleaning

01

## Data Loading

Imported dataset using pandas

02

## Exploration

Analyzed structure and summary statistics

03

## Missing Data

Imputed 37 missing review ratings using median

04

## Feature Engineering

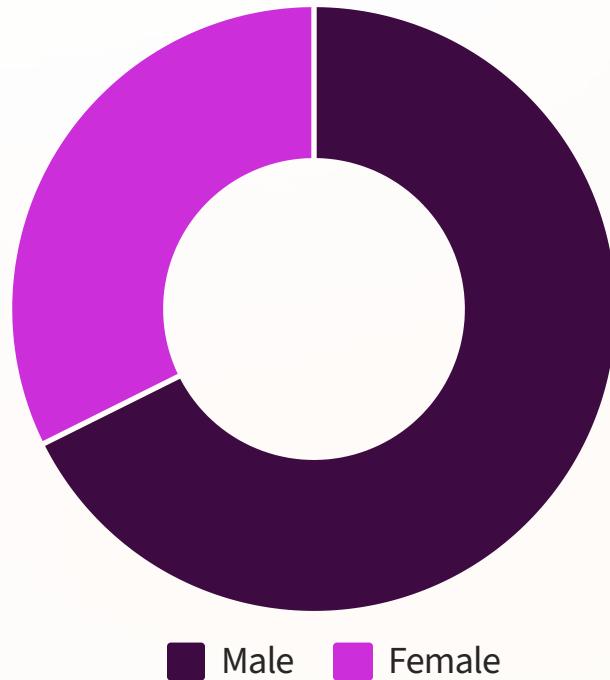
Created age groups and purchase frequency metrics

05

## Database Integration

Loaded cleaned data into PostgreSQL

# Revenue by Gender



## Key Finding

Male customers generate 68% of total revenue

Female segment shows opportunity for targeted growth campaigns

# Top Products by Rating



3.86/5

Gloves



3.84/5

Sandals



3.82/5

Boots



3.80/5

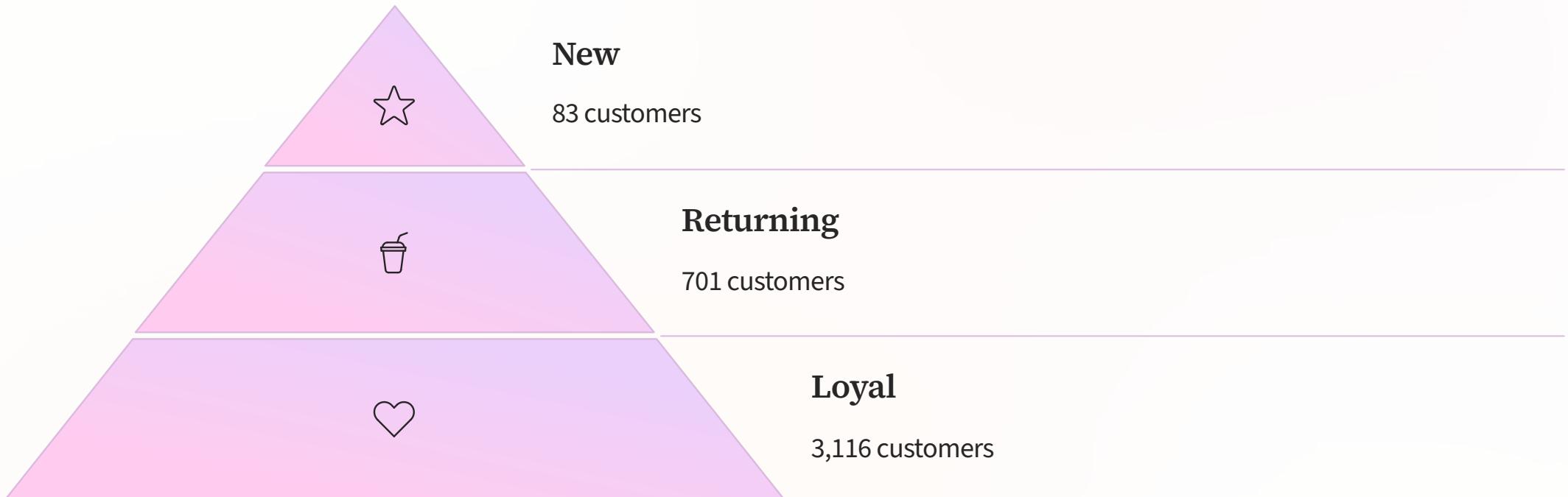
Hat



3.78/5

Skirt

# Customer Segmentation Insights

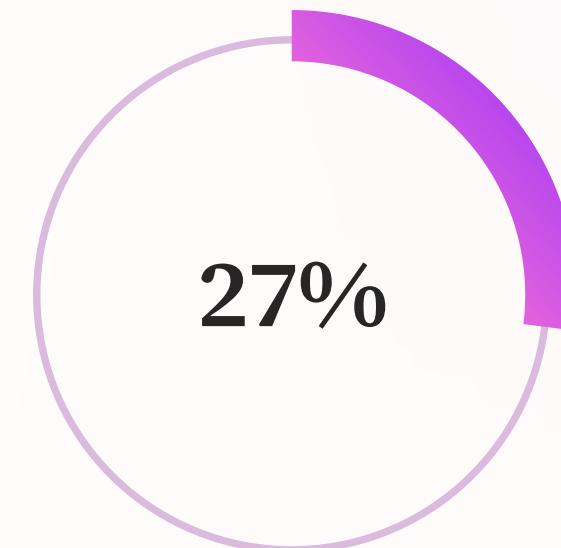


80% of customer base classified as loyal - strong retention foundation



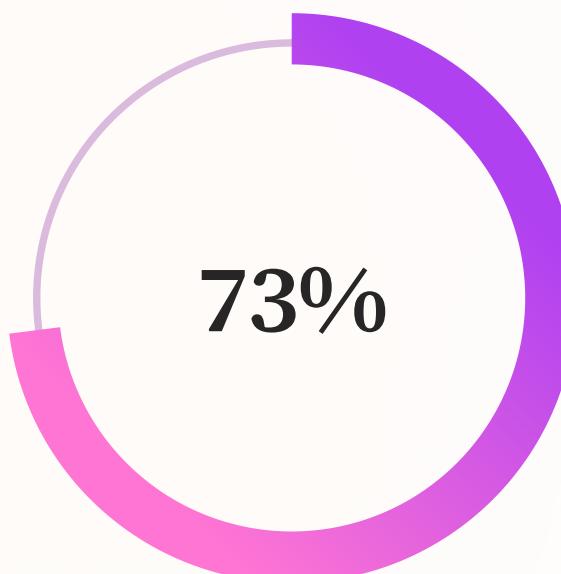
## SUBSCRIPTION ANALYSIS

# Subscribers vs. Non-Subscribers



## Subscribers

1,053 customers



## Non-Subscribers

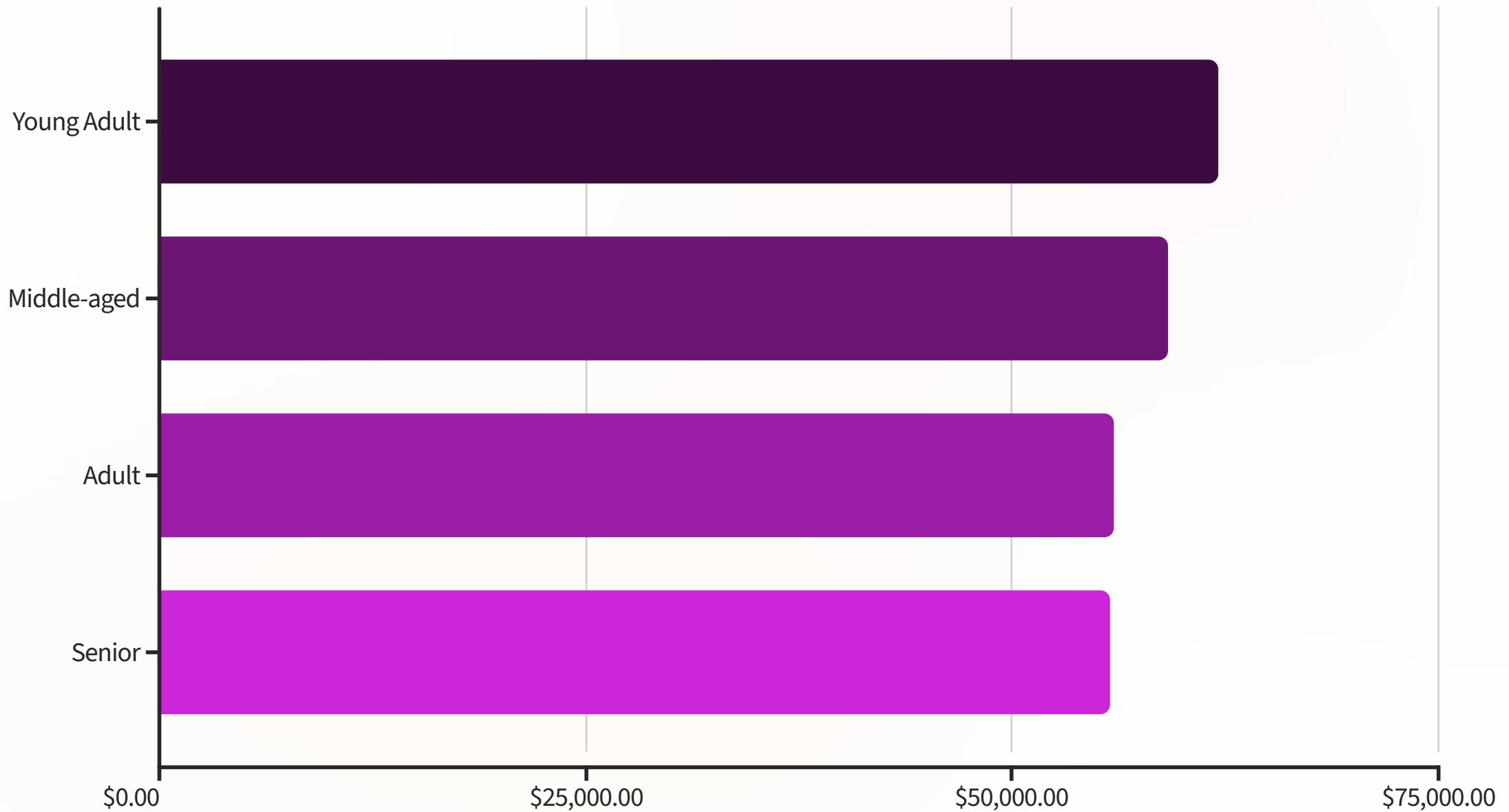
2,847 customers

### Average Spend Comparison

- Subscribers: \$59.49
- Non-subscribers: \$59.87

Minimal spend difference suggests opportunity to enhance subscription value proposition

# Revenue by Age Group



Young adults lead revenue generation - prime target for marketing campaigns



# Interactive Dashboard

**3.9K Customers**

Total analyzed

**\$59.76 Average**

Purchase amount

**3.75 Rating**

Average review

## Customer Behavior Dashboard



**\$59.76**

Average Purchase Amount



**Revenue by Category**



**Sales by Age**

Young Adult

Middle-aged

Senior

Older Adult

Made with **GAMMA**

# Strategic Action Plan

1

## Boost Subscriptions

Promote exclusive benefits to convert 73% non-subscriber base

2

## Loyalty Programs

Reward repeat buyers to strengthen 80% loyal segment

3

## Review Discount Policy

Balance sales boosts with margin control - 839 high-spending discount users identified

4

## Product Positioning

Highlight top-rated items like gloves and sandals in campaigns

5

## Targeted Marketing

Focus on young adults and express-shipping users for maximum ROI