



# Customer Shopping Behavior Analysis

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



## DATASET OVERVIEW

# The Foundation

3.9K

Total Purchases

Transactions analyzed

18

Data Points

Features per customer

\$59.76

Avg Purchase

Per transaction

3.75

Avg Rating

Customer satisfaction

# Data Preparation Journey

01

## Data Loading & Exploration

Imported dataset, checked structure with pandas

02

## Missing Data Handling

Imputed 37 missing review ratings using category medians

03

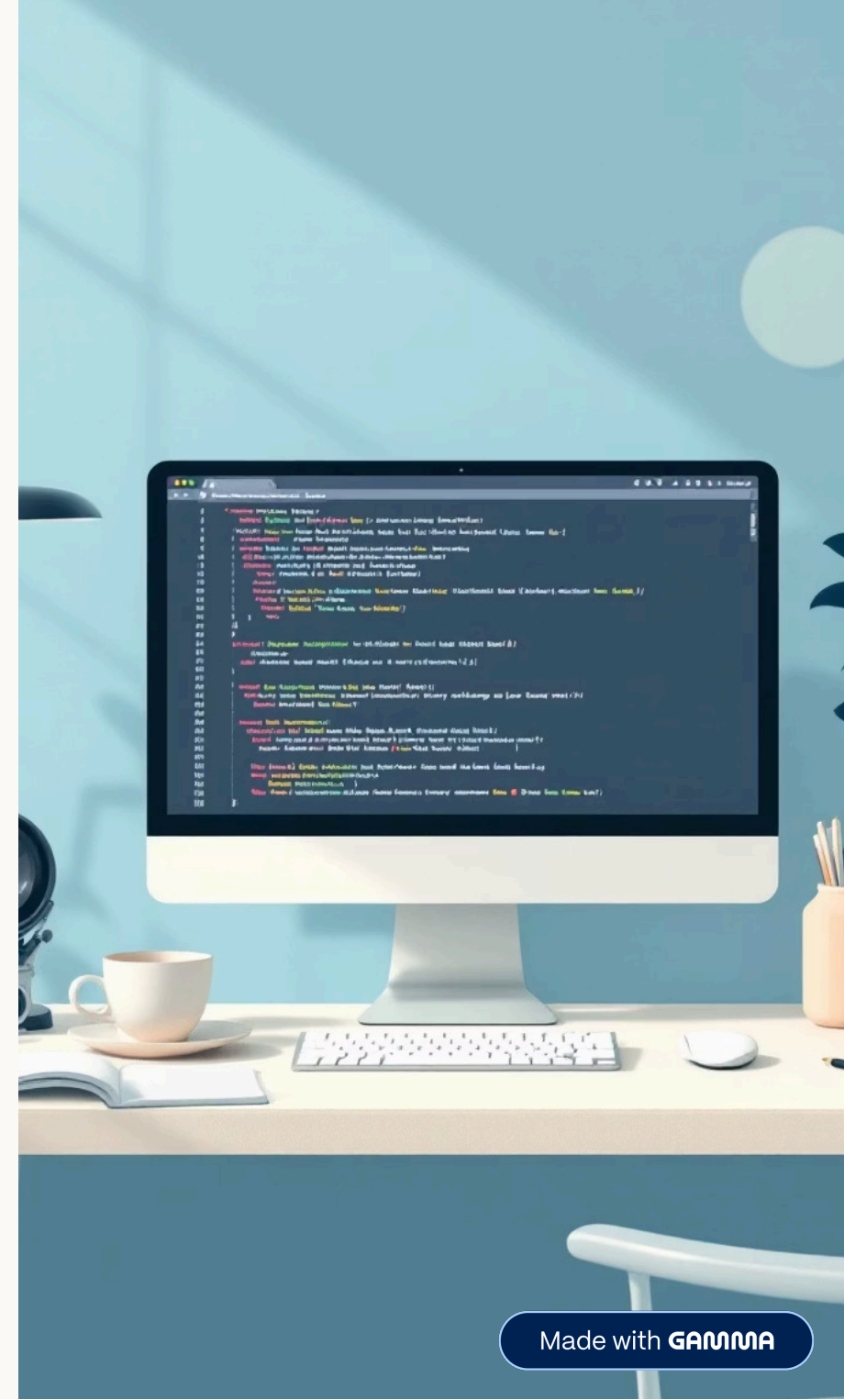
## Feature Engineering

Created age groups and purchase frequency metrics

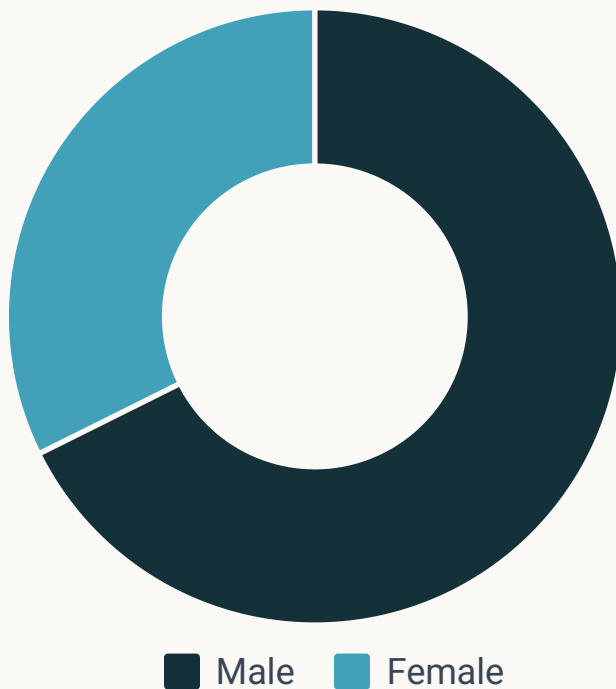
04

## Database Integration

Connected to PostgreSQL for SQL analysis



# Revenue by Gender



## Key Finding

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

This suggests opportunities for targeted marketing campaigns.



# High-Value Discount Users



## 839 Customers

Used discounts but spent above average



## Premium Spenders

Range: \$62-\$97 per purchase

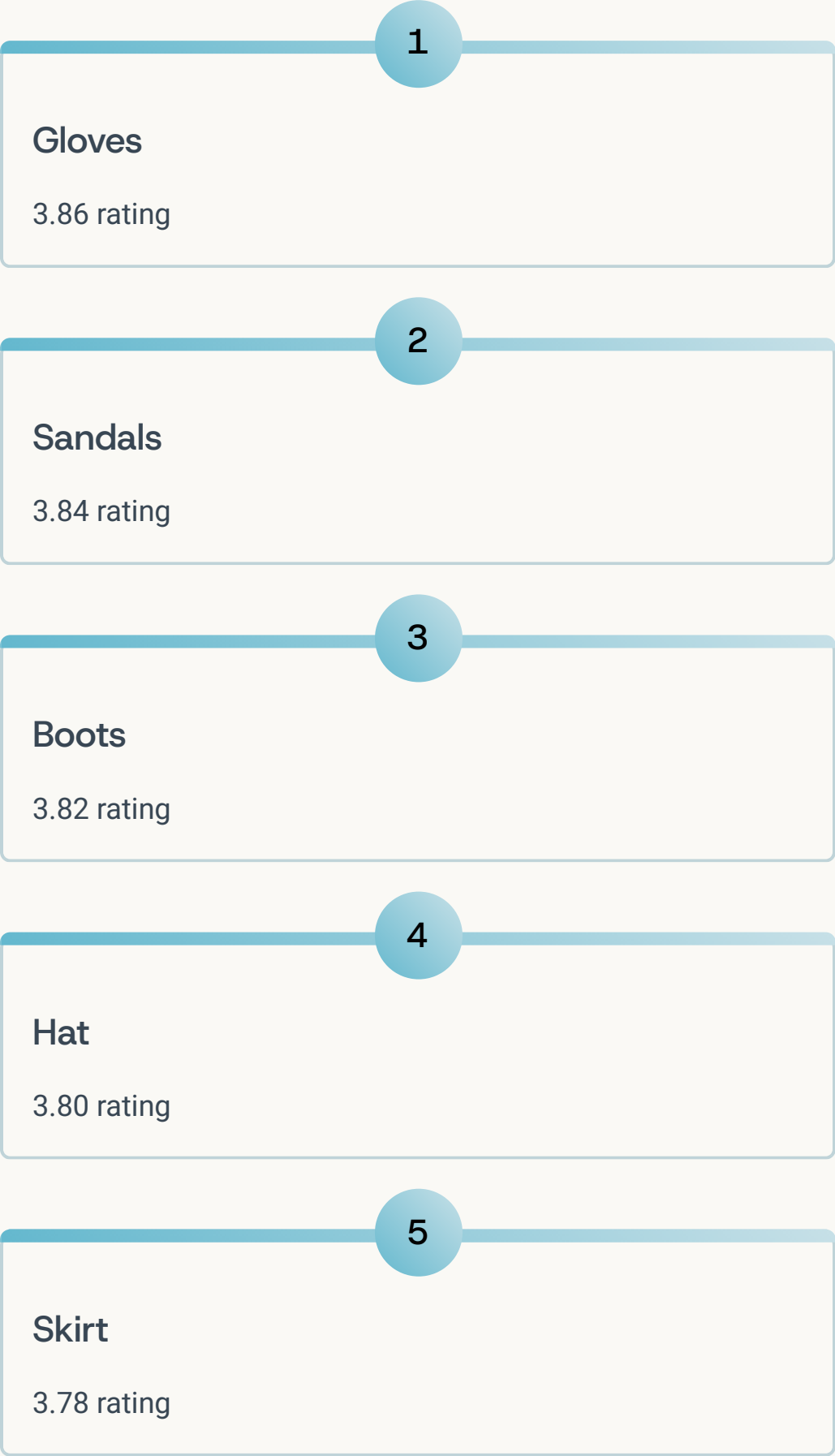


## Strategic Insight

Discounts attract quality customers

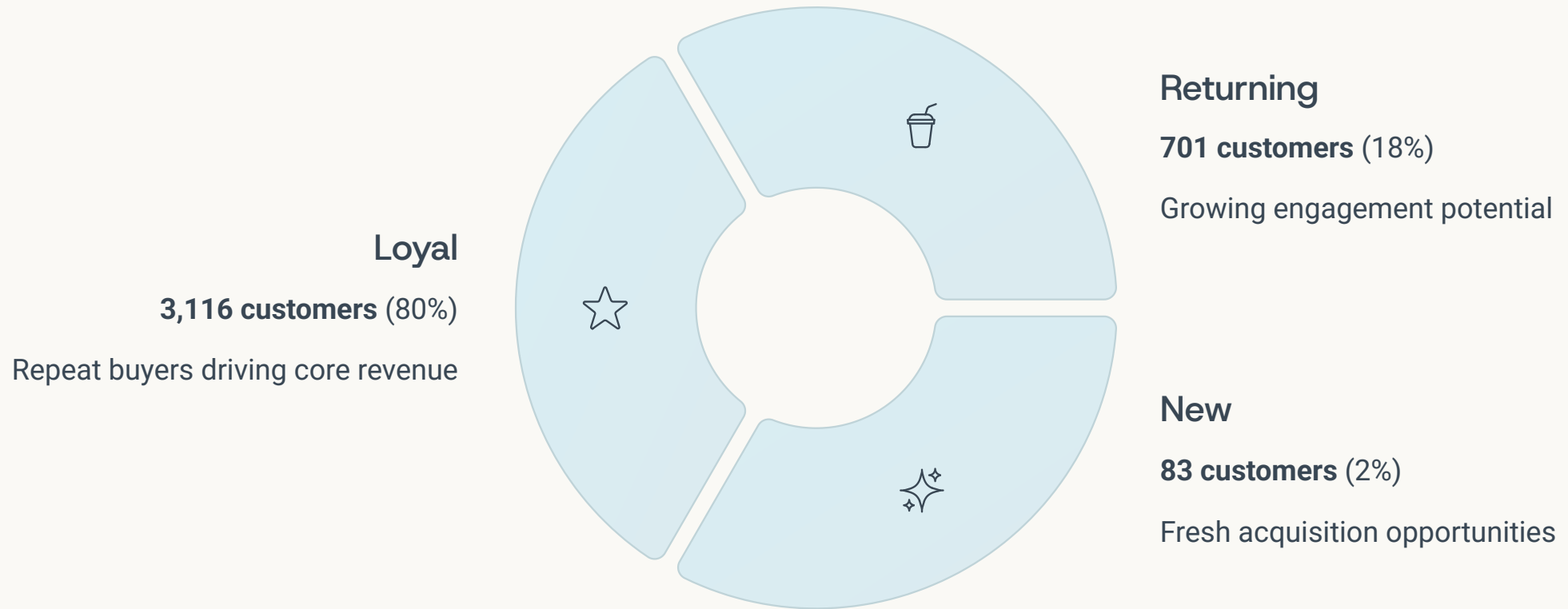
These customers prove that strategic discounting can drive both volume and value.

# Top-Rated Products



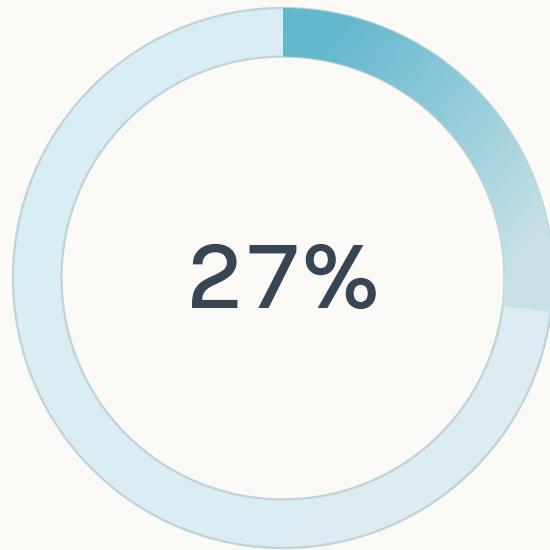
Highlight these top performers in marketing campaigns to drive conversions.

# Customer Segmentation



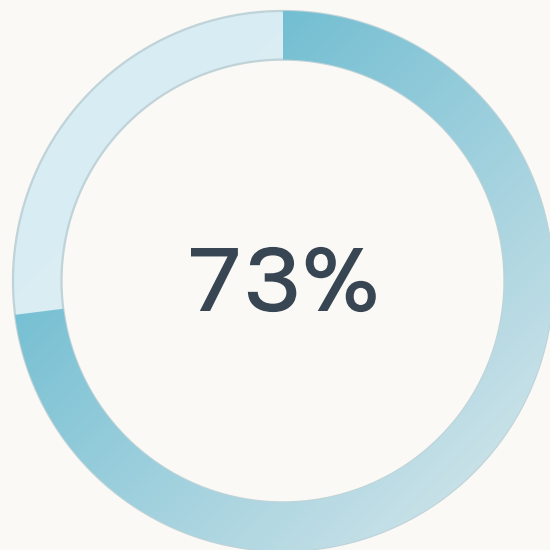


# The Subscription Gap



**Subscribers**

1,053 customers



**Non-Subscribers**

2,847 customers

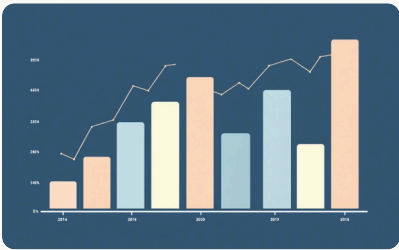
## Revenue Comparison

- Subscribers: \$62,645 total (\$59.49 avg)
- Non-subscribers: \$170,436 total (\$59.87 avg)
- 958 repeat buyers (>5 purchases) are subscribers

📌 Massive untapped potential: 73% of customers aren't subscribed yet

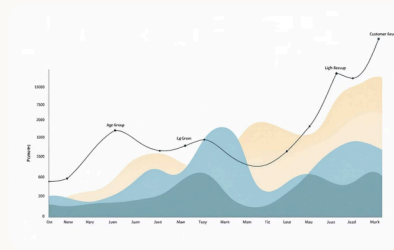


# Interactive Analytics



## Revenue by Category

Clothing leads, followed by Accessories, Footwear, Outerwear



## Age Group Analysis

Young Adults generate highest revenue at \$62,143



## Shipping Insights

Express shipping users spend \$2 more on average

# Action Plan



## Boost Subscriptions

Promote exclusive benefits to convert 73% non-subscribers



## Loyalty Programs

Reward repeat buyers to grow the 80% loyal segment



## Review Discount Policy

Balance sales boosts with margin control for 839 high-value discount users



## Targeted Marketing

Focus on Young Adults, top-rated products, and express shipping users