

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



The Foundation

3,900

Total Purchases

Transactions analyzed

18

Data Points

Features per customer

50

Locations

Geographic coverage

25

Products

Items tracked

Customer Demographics

- ♦ Age, Gender, Location
- ♦ Subscription Status

Shopping Behavior

- ♦ Purchase patterns & frequency
- ♦ Review ratings & preferences

Data Preparation Journey

01

Data Loading & Exploration

Imported dataset, checked structure and summary statistics

02

Missing Data Handling

Imputed 37 missing Review Ratings using category medians

03

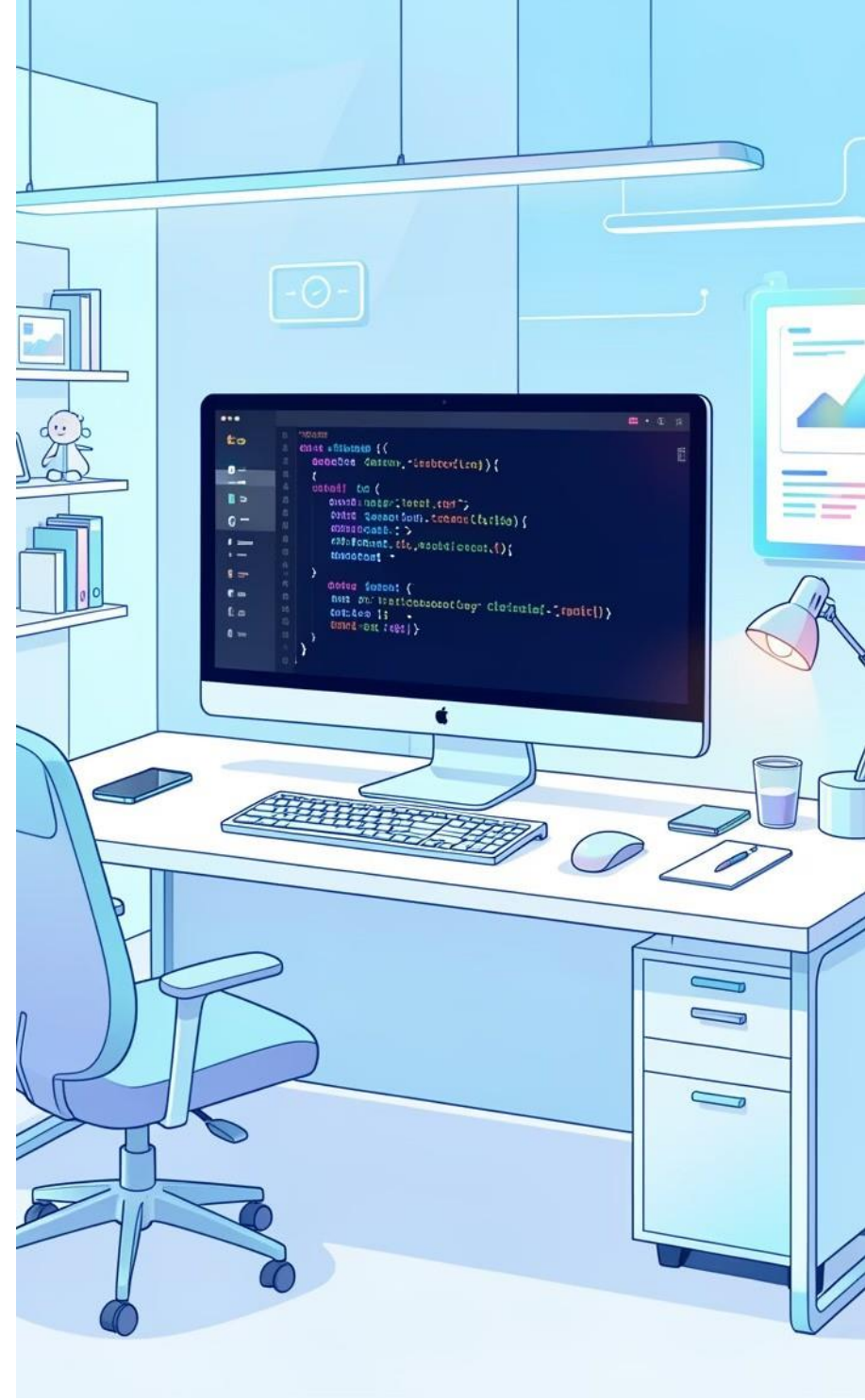
Feature Engineering

Created age groups and purchase frequency metrics

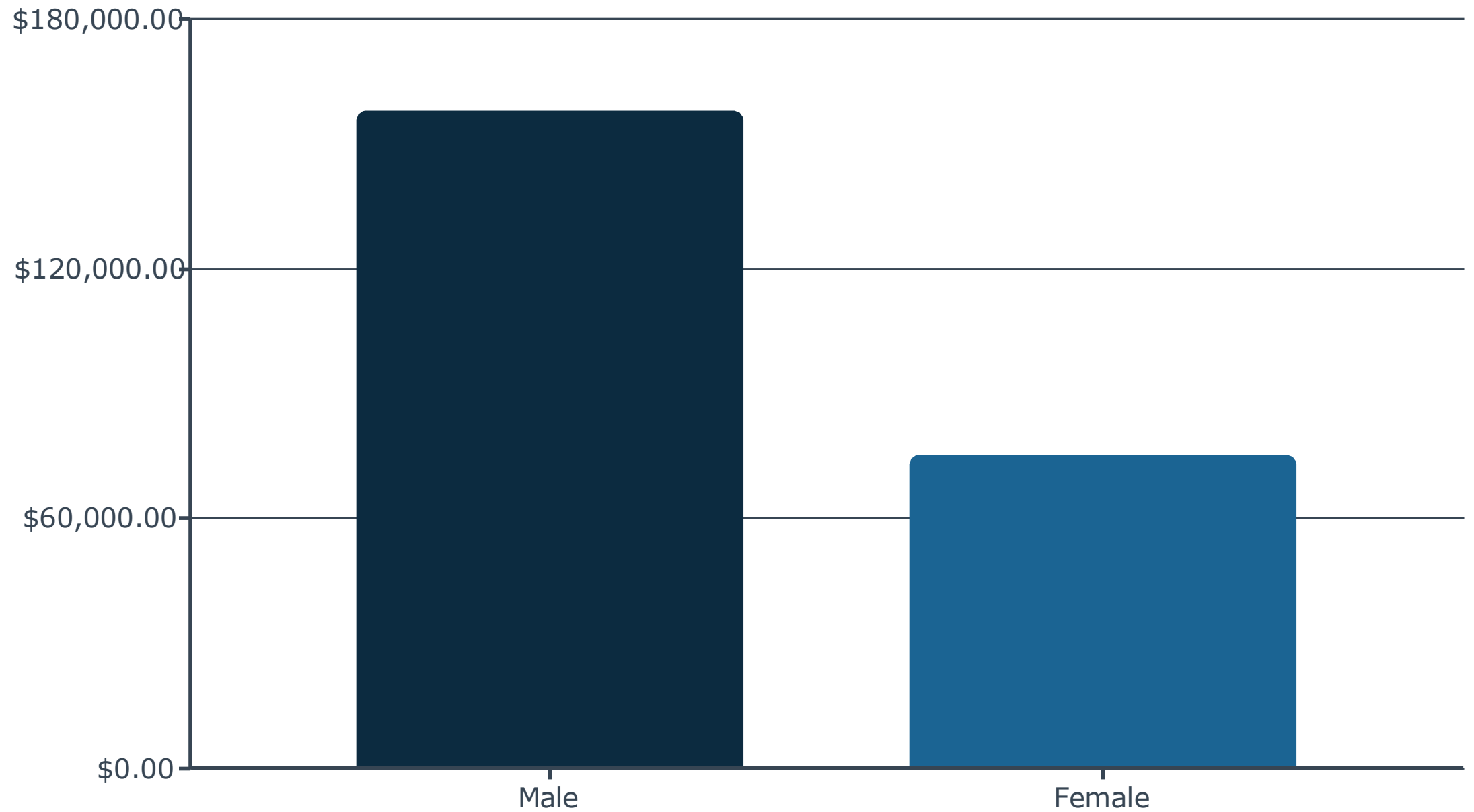
04

Database Integration

Connected to PostgreSQL for advanced SQL analysis



Revenue by Gender



Male customers generate 2.1x more revenue than female customers

Top Performing Products

Highest Rated Items

- Gloves

3.86 average rating
- Sandals

3.84 average rating
- Boots

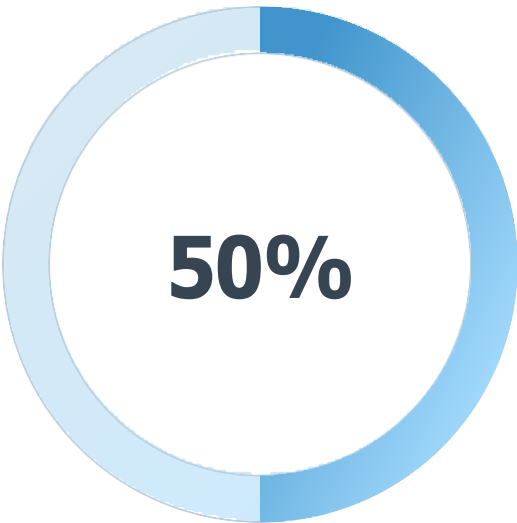
3.82 average rating
- Hat

3.80 average rating
- Skirt

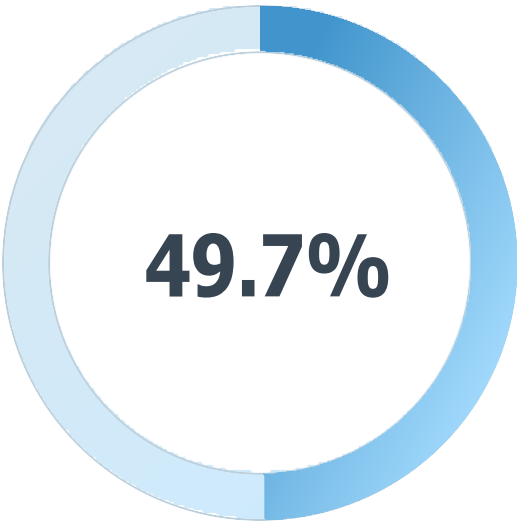
3.78 average rating

Discount Leaders

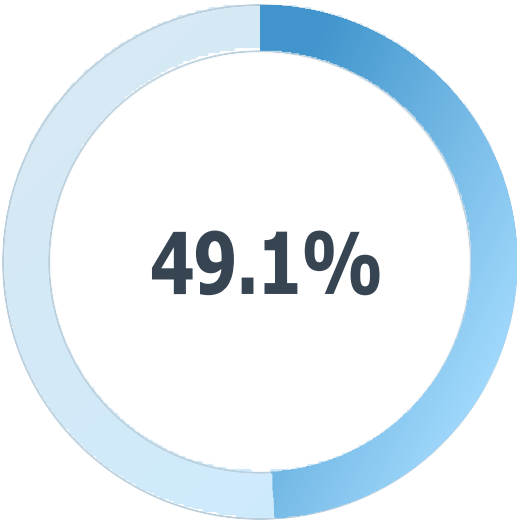
Products with highest discount rates:



Hat

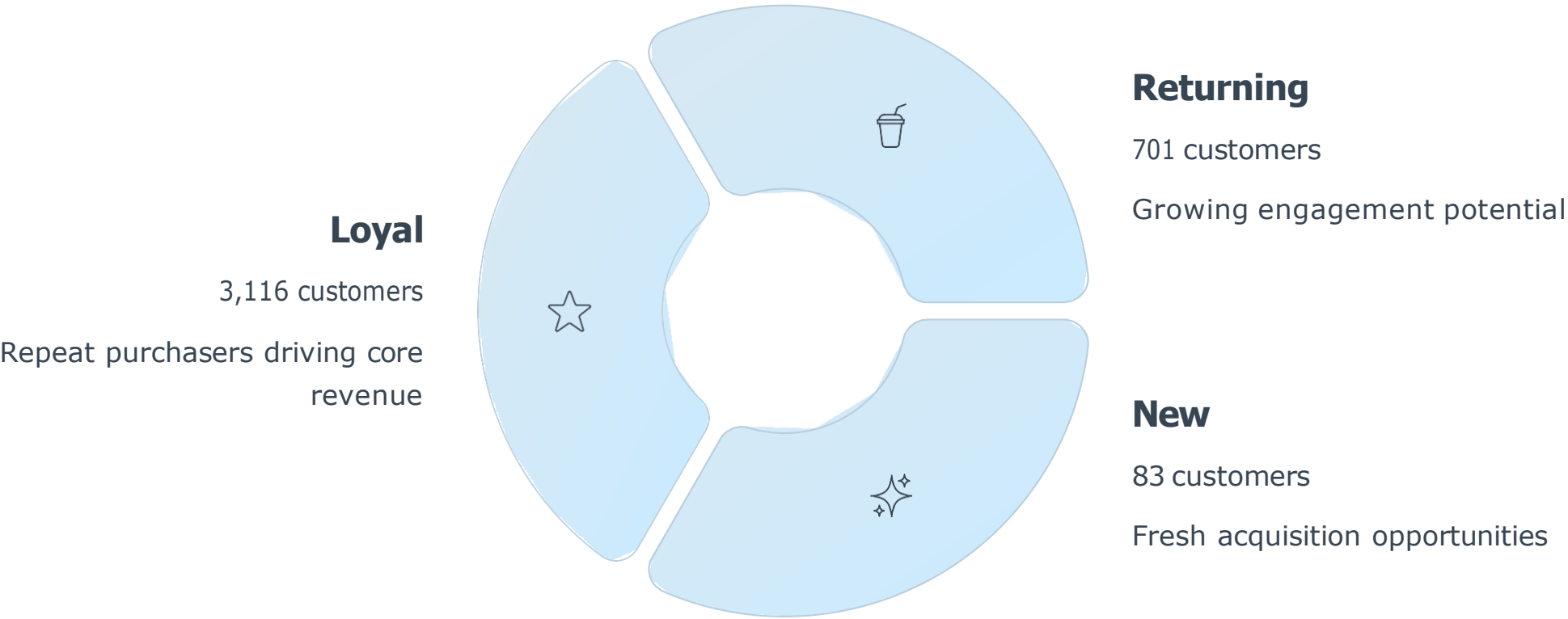


Sneakers



Coat

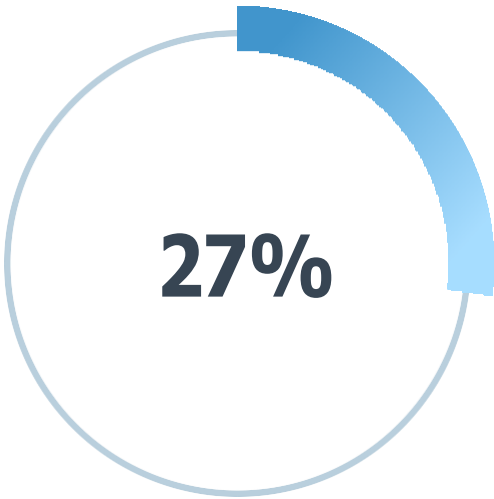
Customer Segmentation



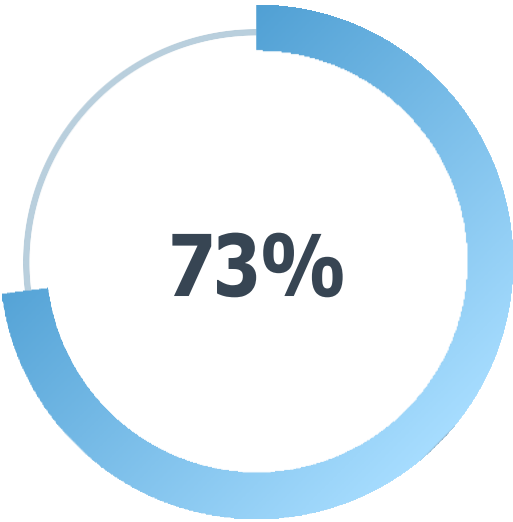
Subscription Insights

Repeat buyers (>5 purchases):

- 2,518 without subscription
- 958 with subscription

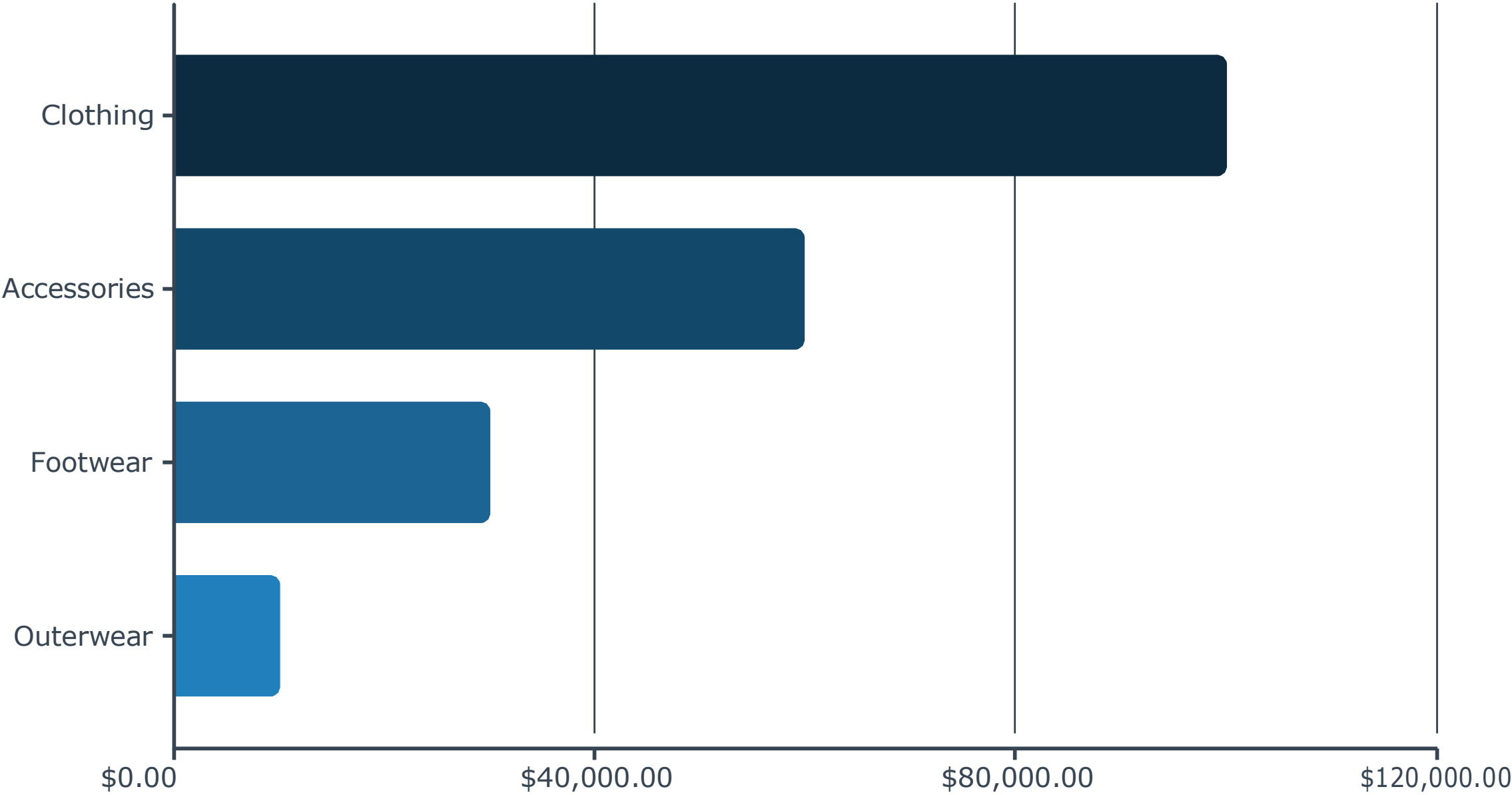


Subscribed



Non-subscribed

Performance by Category & Age



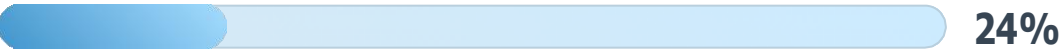
Young Adult

\$62,143 revenue



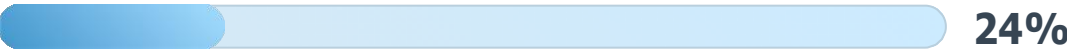
Middle-aged

\$59,197 revenue



Adult

\$55,978 revenue



Senior

\$55,763 revenue

Shipping & Spending Patterns

Average Purchase by Shipping Type

Express

\$60.48 average

Standard

\$58.46 average

Subscriber Comparison

Status	Avg Spend	Total Revenue
Subscribers	\$59.49	\$62,645
Non-subscribers	\$59.87	\$170,436

📌 High-spending discount users: 839 customers spent above average despite using discounts



POWER BI DASHBOARD

Interactive Visual Analytics

\$ **sU9.7e**
Average purchase amount

👤 **3.9K**
Total customers

★ **3.7U**
Average review rating

Actionable Business Insights

1

Boost Subscriptions

Promote exclusive benefits to convert 2,518 repeat buyers without subscriptions

2

Customer Loyalty Programs

Reward repeat buyers to accelerate movement into "Loyal" segment

3

Review Discount Policy

Balance sales boosts with margin control—839 high spenders use discounts

4

Product Positioning

Highlight top-rated items (Gloves, Sandals, Boots) in marketing campaigns

5

Targeted Marketing

Focus on Young Adults (\$62K revenue) and express-shipping users (\$60.48 avg)