



Customer Shopping Behavior Analysis

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



DATASET OVERVIEW

The Data Behind the Insights

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

Data Preparation & Cleaning

01

Data Loading

Imported dataset using pandas for analysis

02

Missing Data

Imputed 37 missing review ratings using median values

03

Feature Engineering

Created age groups and purchase frequency metrics

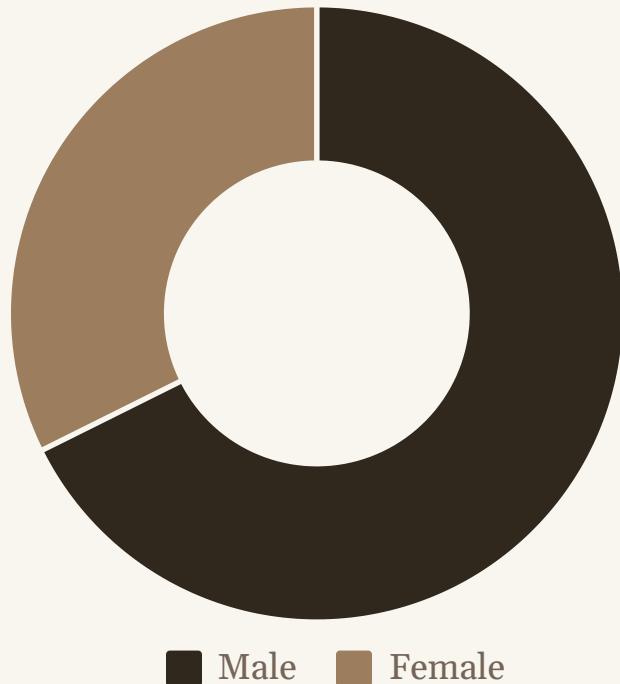
04

Database Integration

Loaded cleaned data into PostgreSQL



Gender Revenue Comparison



Male customers drive **68%** of total revenue

Significant opportunity to increase female customer engagement and spending

Top Products by Customer Rating



Gloves

Highest rated at 3.86 stars



Sandals

Strong performance at 3.84 stars



Boots

Solid rating of 3.82 stars



Hat

Customer favorite at 3.80 stars

Understanding Our Customer Base

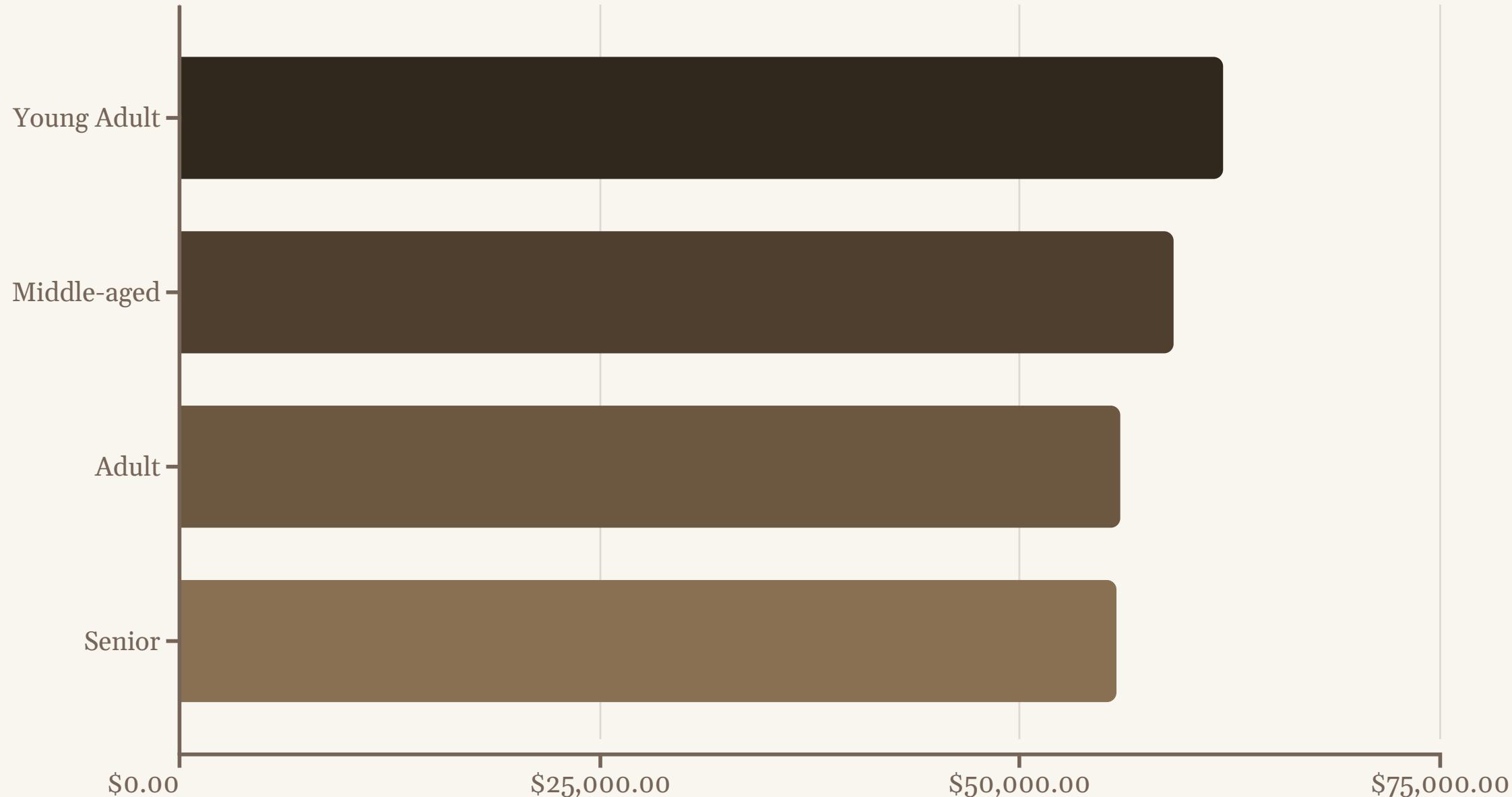


Loyal
3,116 customers
Repeat buyers driving consistent revenue

Returning
701 customers
Growing engagement potential

New
83 customers
Fresh acquisition opportunities

Revenue by Age Group



Young adults lead revenue generation, but all segments show strong engagement

SUBSCRIPTION ANALYSIS

Subscribers vs. Non-Subscribers

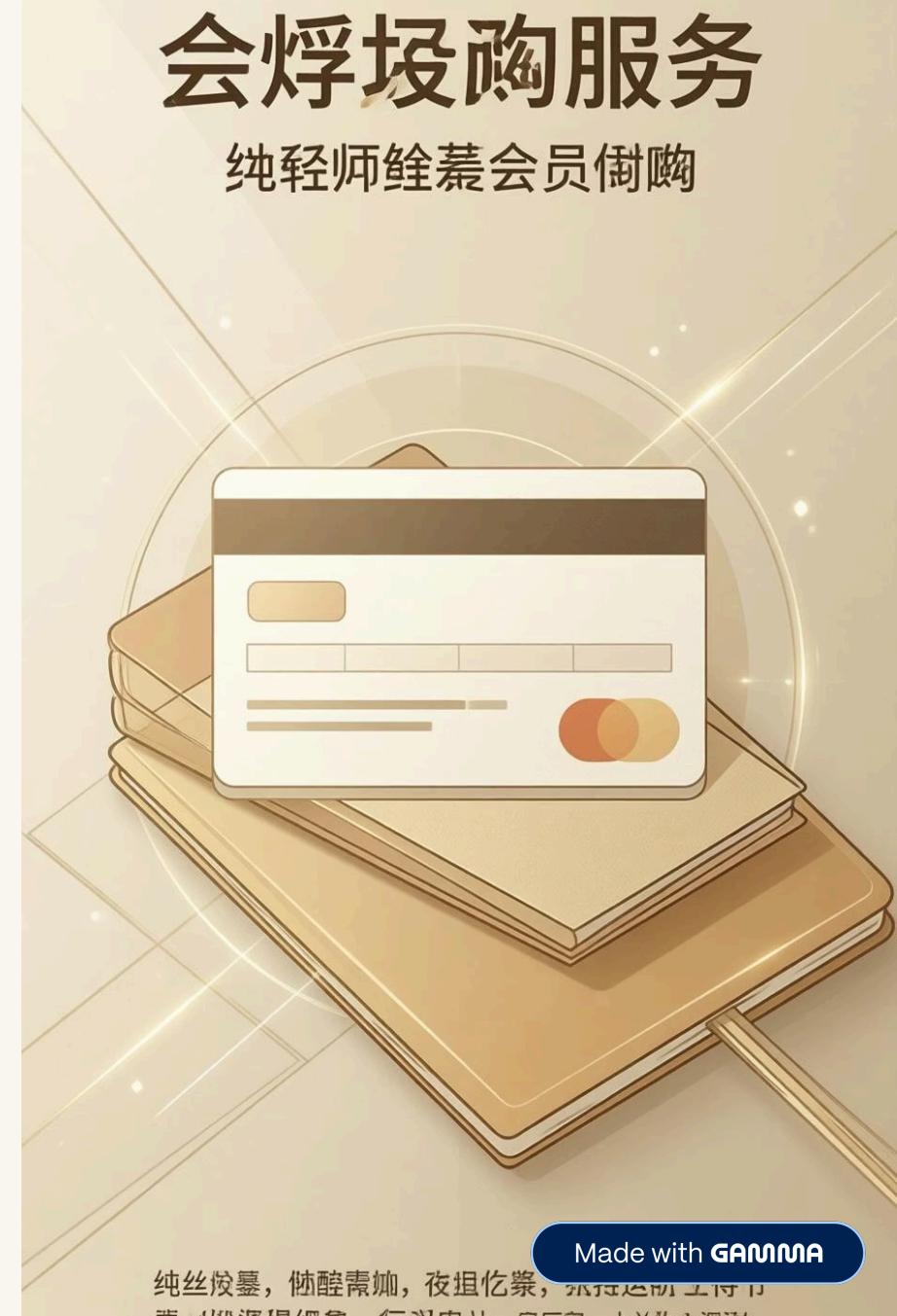
Subscription Status

- 27% subscribed customers
- 73% non-subscribers
- Similar average spend: **\$59.49** vs **\$59.87**

Key Finding

Repeat buyers with 5+ purchases show higher subscription rates

Opportunity to convert loyal customers into subscribers





CATEGORY PERFORMANCE

Sales & Revenue by Category

Clothing

\$100K revenue

1,800 sales

Top performer across all metrics

Accessories

\$80K revenue

1,200 sales

Strong secondary category

Footwear

\$40K revenue

600 sales

Steady performance

Outerwear

\$20K revenue

300 sales

Growth opportunity

Strategic Recommendations



Boost Subscriptions

Promote exclusive benefits to convert loyal customers



Loyalty Programs

Reward repeat buyers to increase retention



Targeted Marketing

Focus on high-revenue age groups and express shipping users



Product Positioning

Highlight top-rated items in campaigns

