



Customer Shopping Behavior Analysis

Comprehensive insights from 3,900 transactions

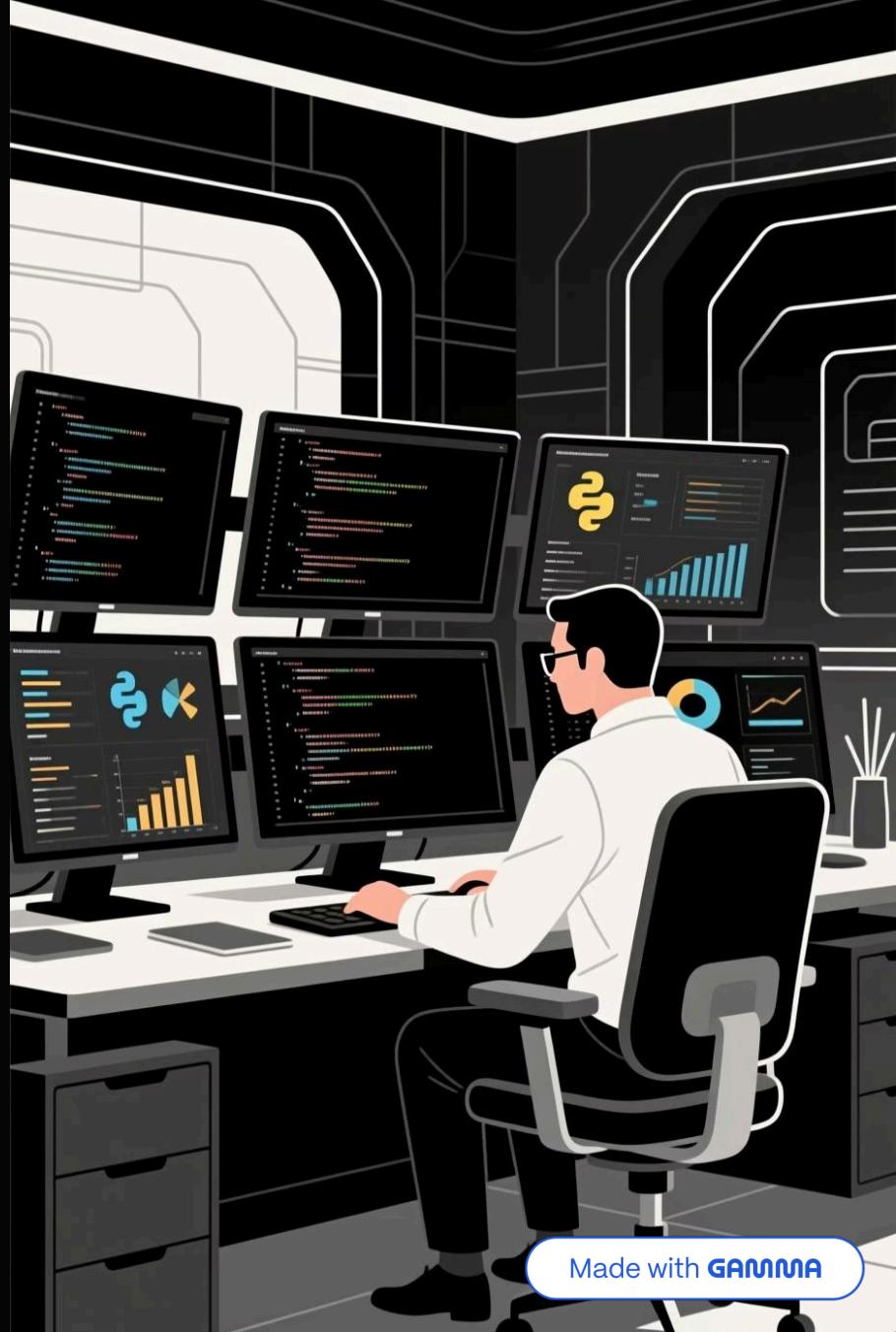
Project Overview

Analysis Scope

- 3,900 customer transactions
- Multiple product categories
- 18 key data features
- Multi-season coverage

Tools & Methods

- Python (Pandas, NumPy)
- PostgreSQL (pgAdmin)
- Power BI Dashboard
- Advanced SQL queries



Dataset Deep Dive



Demographics

Age, gender, location, subscription status



Purchase Details

Item, category, amount, season, size, color



Behavior Metrics

Discounts, reviews, shipping, payment methods

3,900

Total Transactions

18

Data Features

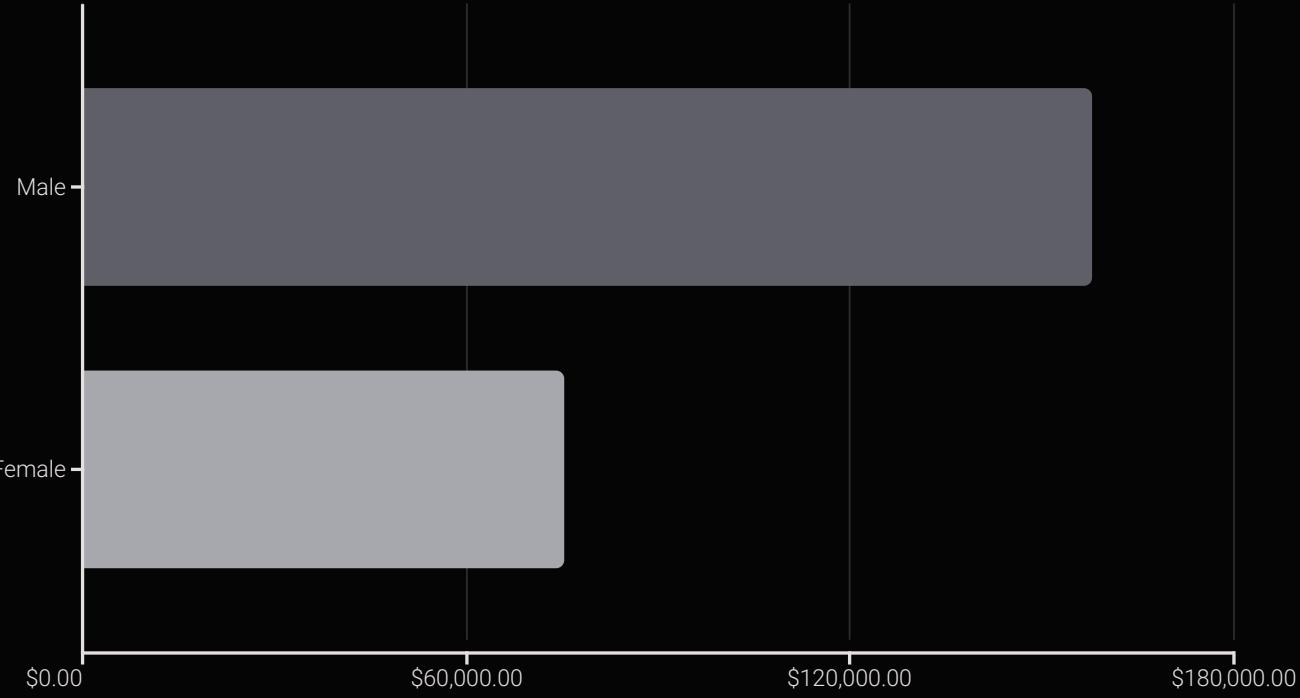
\$59.76

Avg Purchase

3.75

Avg Rating

Revenue by Gender



Key Insight

Male customers generate **2x more revenue** than female customers

Opportunity for male-focused campaigns while maintaining female segment

Top Products by Rating

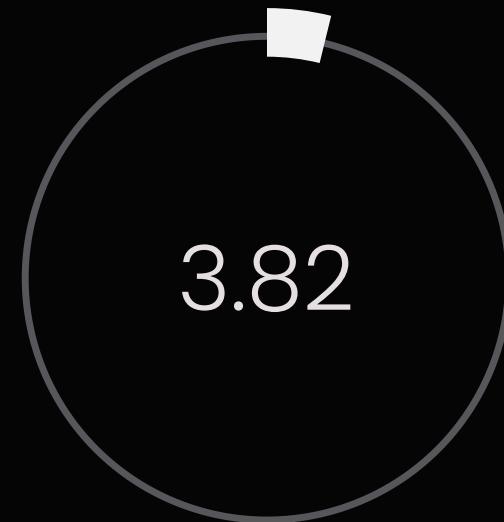


Gloves

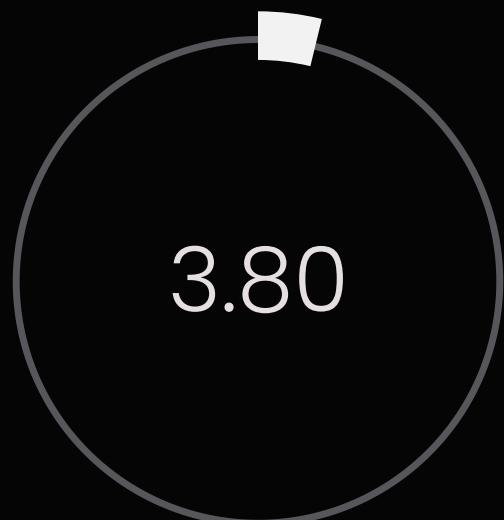
Highest rated



Sandals



Boots



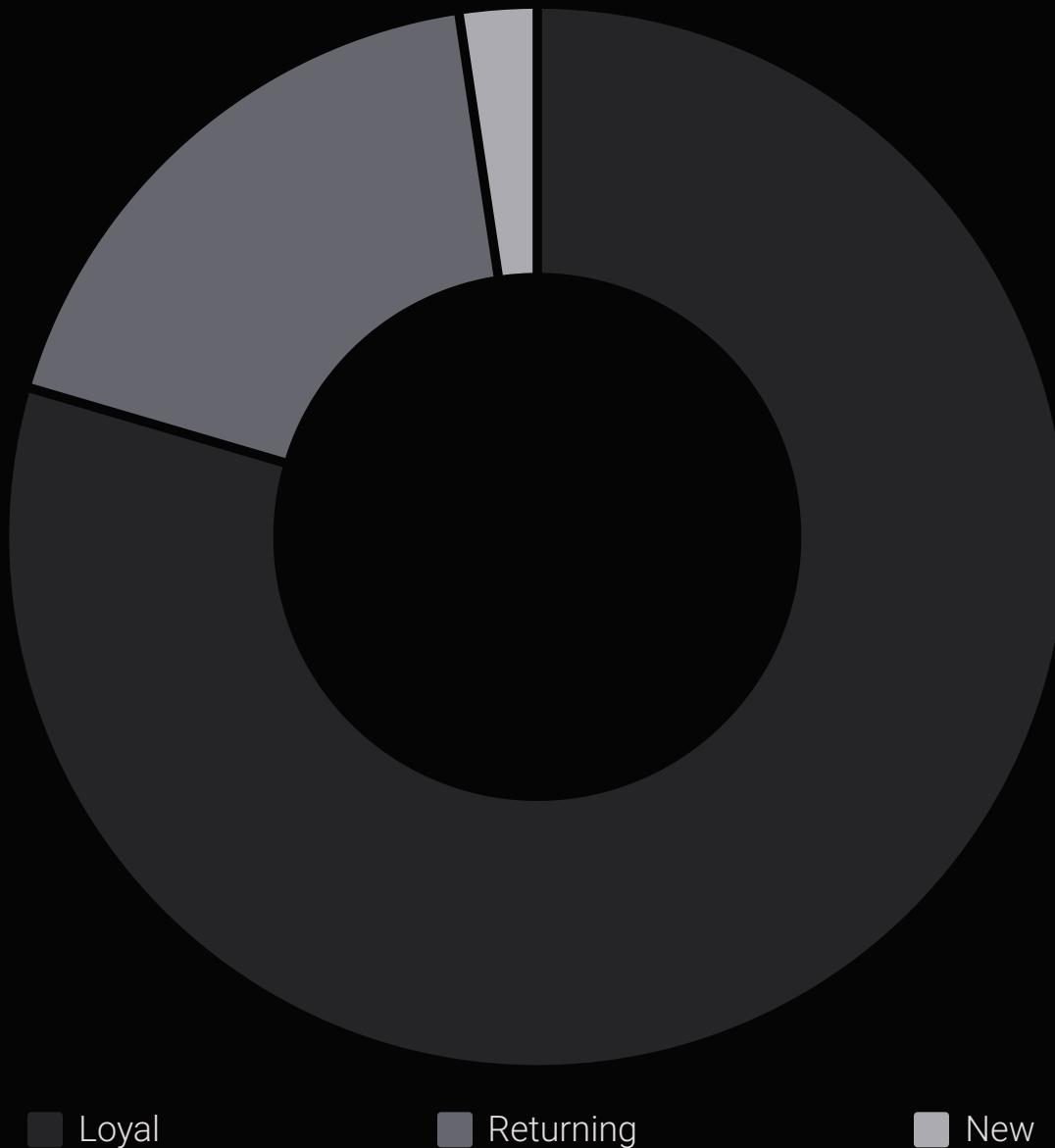
Hat



Skirt

Strong customer satisfaction makes these ideal for marketing campaigns and bundles

Customer Segmentation



■ Loyal

■ Returning

■ New

Strong Retention

80% loyal customer base indicates excellent retention

Acquisition Gap

Only 83 new customers—focus area for growth

Subscription Opportunity

2,518

Repeat Buyers

Without subscription

27%

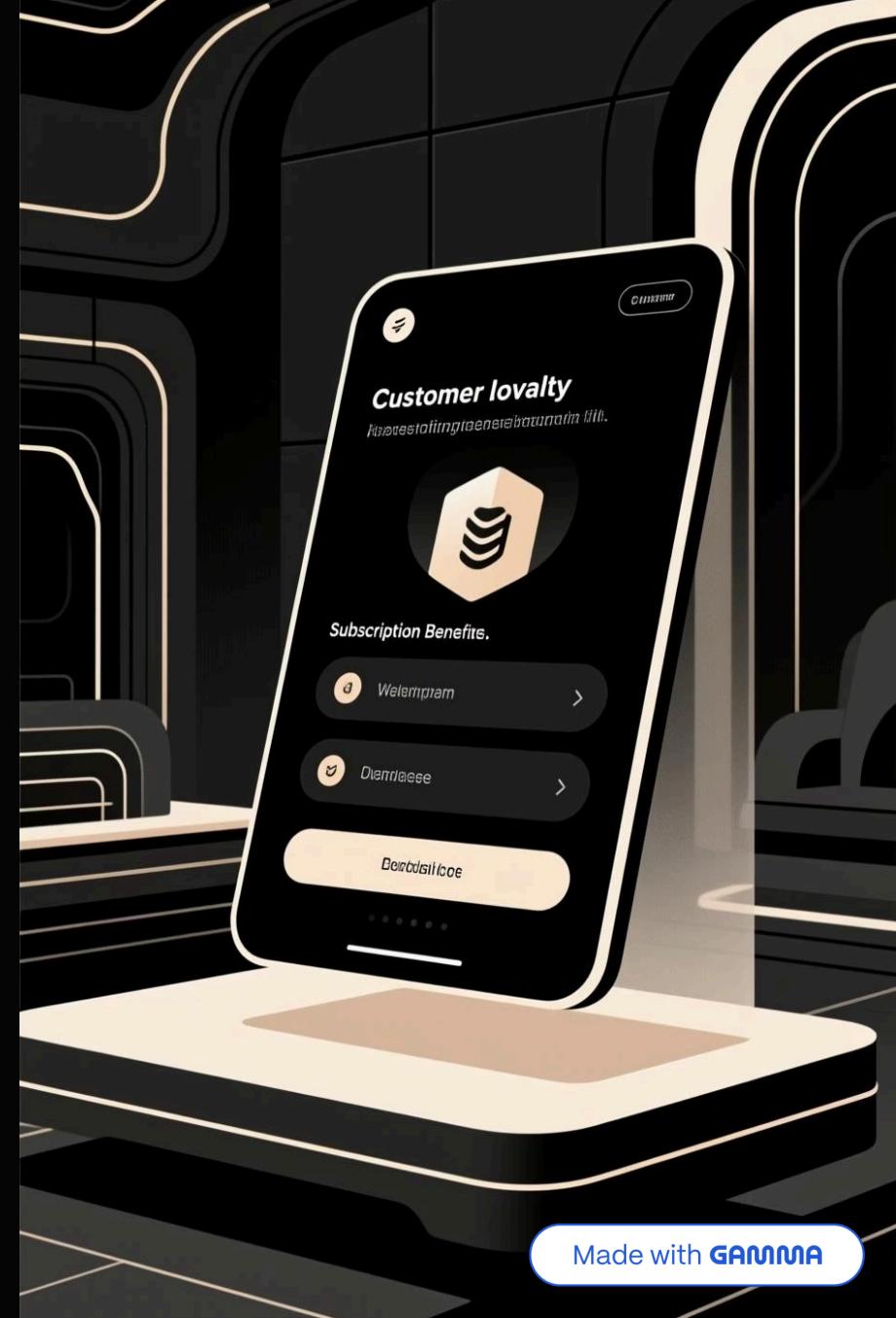
Current Rate

Subscribed customers

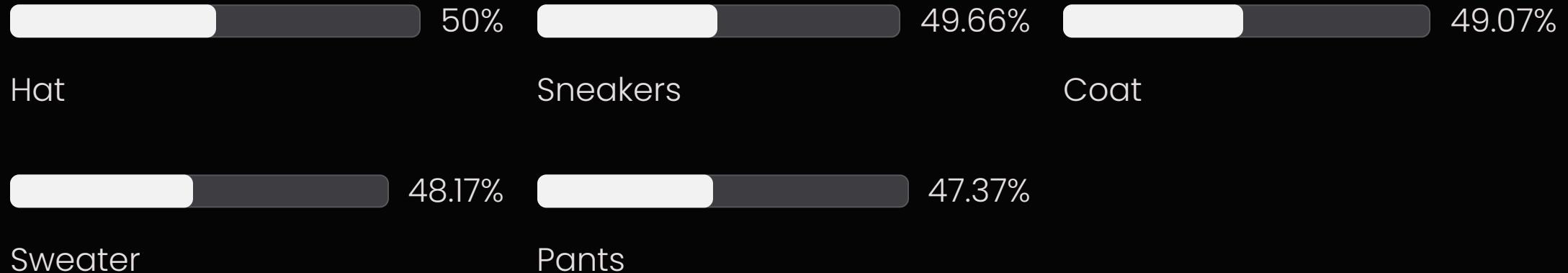
Massive Conversion Potential

Heavy buyers not yet subscribed represent high-priority targets

- Offer exclusive discounts
- Provide early access perks
- Create loyalty rewards program

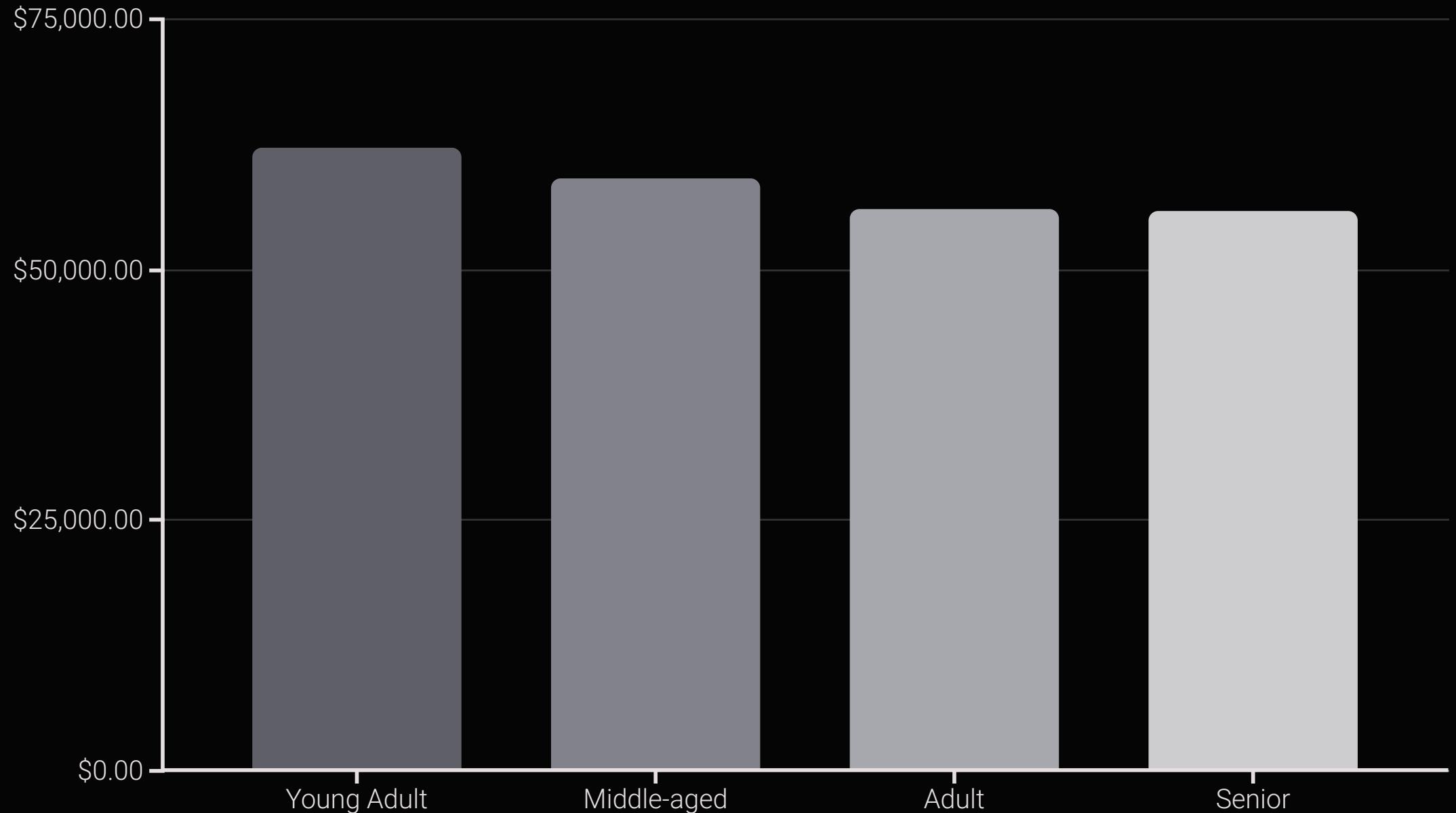


Discount-Dependent Products



- Strategic Insight:** These products rely heavily on discounts. Test reduced discount levels or value bundles to protect margins while maintaining volume.

Revenue by Age Group



All age groups contribute meaningfully—balanced marketing with slight focus on younger demographics for digital channels

Key Recommendations

01

Convert Repeat Buyers

Target 2,518 non-subscribed repeat buyers with exclusive incentives

02

Optimize Pricing

Test reduced discounts on high-dependency products to protect margins

03

Leverage Top Products

Feature highest-rated items in campaigns and recommendations

04

Acquire New Customers

Invest in awareness campaigns to grow the small new customer segment

05

Promote Express Shipping

Encourage upgrades—express customers spend \$2 more on average