

Customer Shopping Behavior Analysis

Analyzing 3,900 transactions to uncover actionable insights across demographics, product performance, and purchase behavior.



Key Findings at a Glance



Revenue Concentration

Small set of age groups and minority of customers drive majority of revenue.



Discount Behavior

High-revenue purchases occur even with discounts applied, indicating price-sensitive high spenders.



Subscription Power

Non-subscribers spend slightly more on average and contribute disproportionately high share of total revenue.



Product Quality

Top-rated products align with best-sellers, showing quality drives repeat purchases.





Data Foundation

Dataset Overview

- 3,900 transaction rows analyzed
- 18 key dimensions tracked
- 37 missing values in review ratings
- Imputed using median per category

Key Dimensions

- Customer demographics (age, gender, location)
- Purchase details (product, category, amount)
- Behavior indicators (discounts, ratings, frequency)
- Engineered fields (age groups, customer segments)



Gender Revenue Insights

Higher

Male AOV

Males contribute higher share of orders and revenue with larger average order values.

Priority

Marketing Focus

Male segment should be prioritized for lookalike marketing and product assortment.

Business Actions: Tailor campaigns to male segment while designing acquisition strategies for female customers. Consider merchandising and product bundles that increase AOV for female shoppers.



High-Value Discount Users

Discount-using yet high-spending customers signal that promotions can pull larger basket sizes or attract premium buyers during sales events.



Identify

Customers who use discounts but spend above average

Target

Prime candidates for tiered promotions and loyalty incentives

Optimize

Personalized offers that protect margin while encouraging frequency

Product review



Product review

Product Performance Excellence

Top-Rated Products Drive Sales

Products with highest review ratings should be cross-referenced with sales volume. High ratings that don't translate to high revenue represent opportunities for better placement and promotion.

Actions: Promote top-rated products in marketing channels, use ratings in ad copy, prioritize inventory, and cross-sell with faster-moving SKUs.



Premium Quality



Customer Favorite

Shipping Strategy Opportunity



Express AOV

Express shipping customers show higher average order values



Positioning

Express indicates urgency and willingness to pay for convenience

Business Actions: Position express shipping as premium offering with value-add bundles. Test price elasticity and consider free express thresholds for orders above certain values to drive higher AOV.

Subscription vs. Non-Subscribers

Subscription Loyalty

Subscriptions correlate with increased loyalty and lifetime value, though non-subscribers show slightly higher average spend per transaction.

Growth Strategy

Promote subscription benefits aggressively through trials, referral bonuses, and retention perks to increase lifetime value.



Customer Segmentation Strategy

O1

New Customers

Welcome series and onboarding campaigns to drive first repeat purchase

O2

Returning Customers

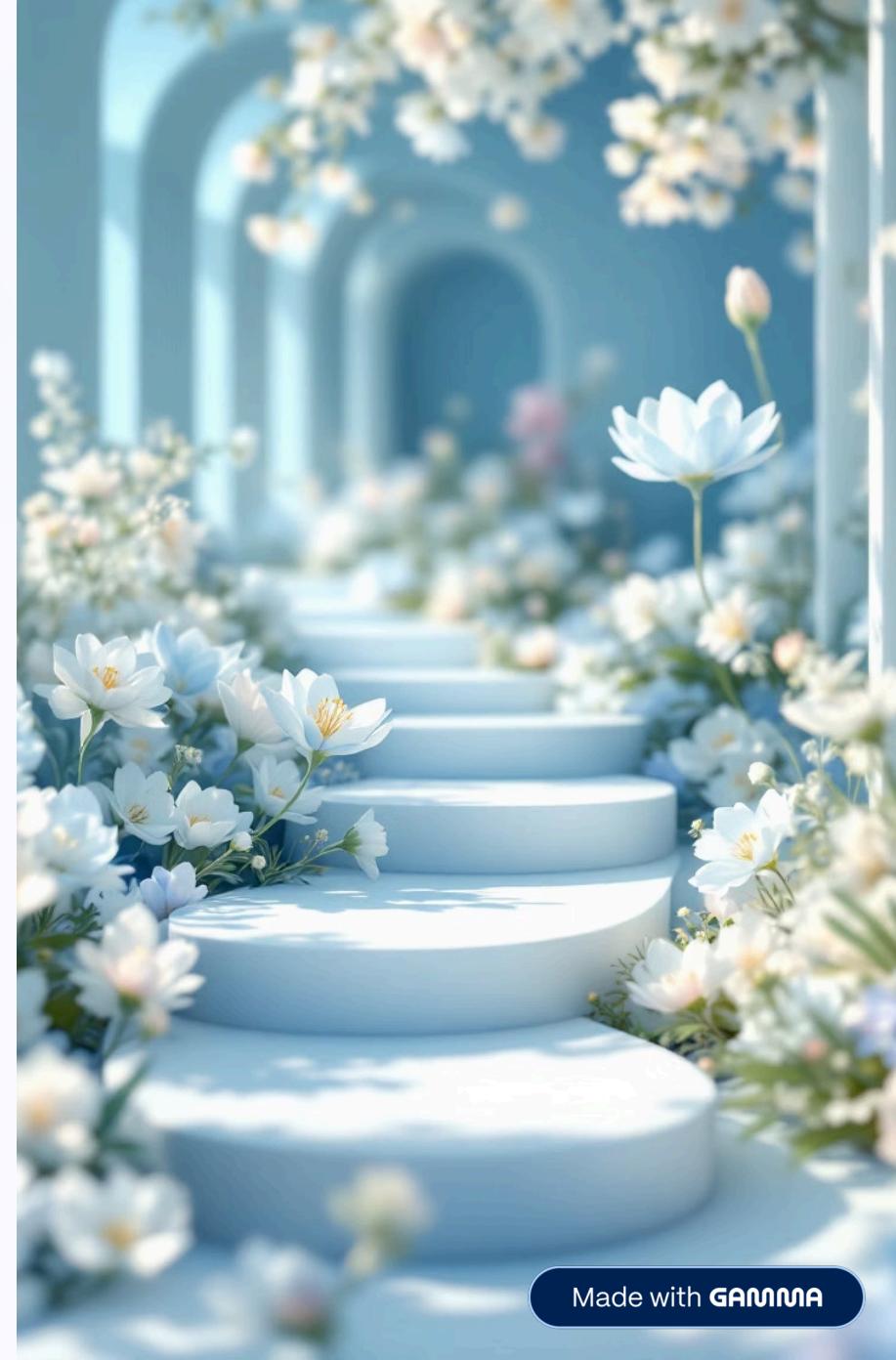
Main source of growth potential - convert to loyal through targeted programs

O3

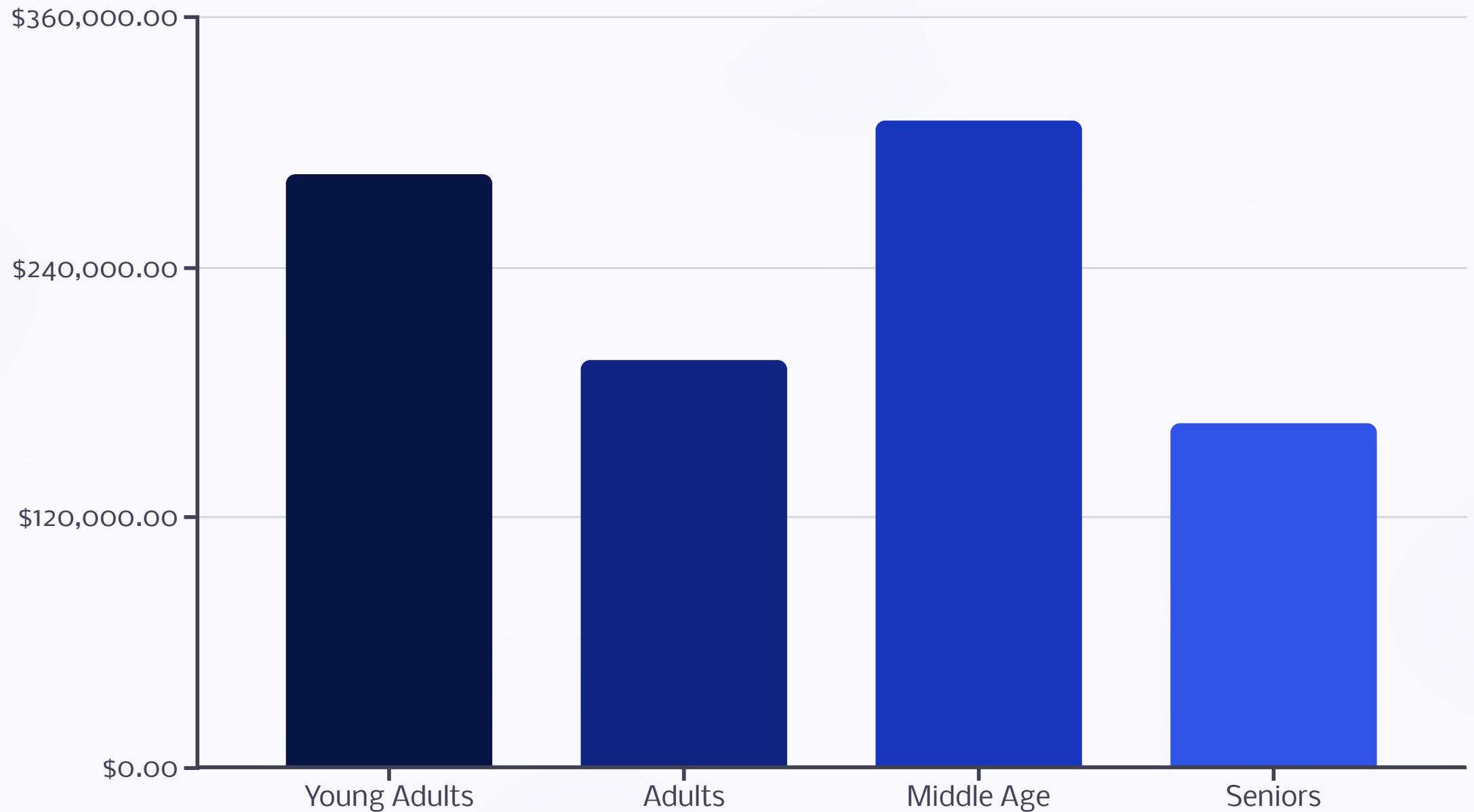
Loyal Customers

10+ purchases, majority of revenue - provide VIP perks and referral incentives

Key Insight: Loyal customers with 5+ purchases are significantly more likely to subscribe. Bundle subscription sign-ups at points of high satisfaction.



Revenue by Age Group



Young Adults and Middle-Age groups contribute the largest revenue share. Tailor campaigns to these segments while designing acquisition strategies for Adults and Seniors to maximize overall growth.