Consumer Growth Analytics

Transforming purchase data into strategic intelligence

The Challenge & Opportunity

Raw Data

3,900 customer records with 18 attributes capturing behavior and transactions

Strategic Gap

Untapped insights into loyalty drivers and revenue optimization opportunities

Our Goal

Convert transactional data into actionable growth recommendations

End-to-End Analytical Approach

01

Data Engineering (Python)

Cleaned and transformed 3,900 records using Pandas, created segmentation features

02

SQL Analysis (PostgreSQL)

Executed advanced queries to uncover customer segments, loyalty patterns, and product performance

03

Visualization (Power BI)

Built interactive dashboard with KPIs, slicers, and trend analysis for stakeholder insights

Key Performance Indicators

$233K
Total Revenue

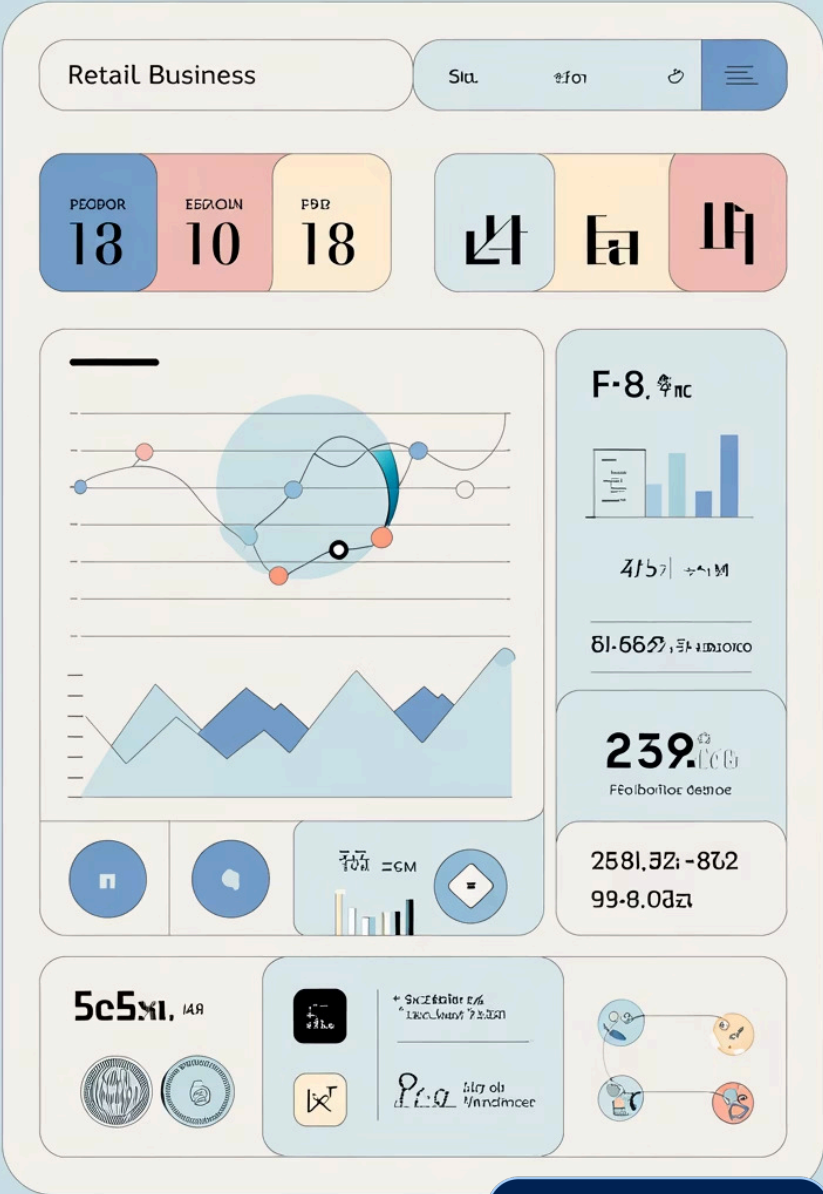Across all customer segments and categories

$59.76
Average Order Value

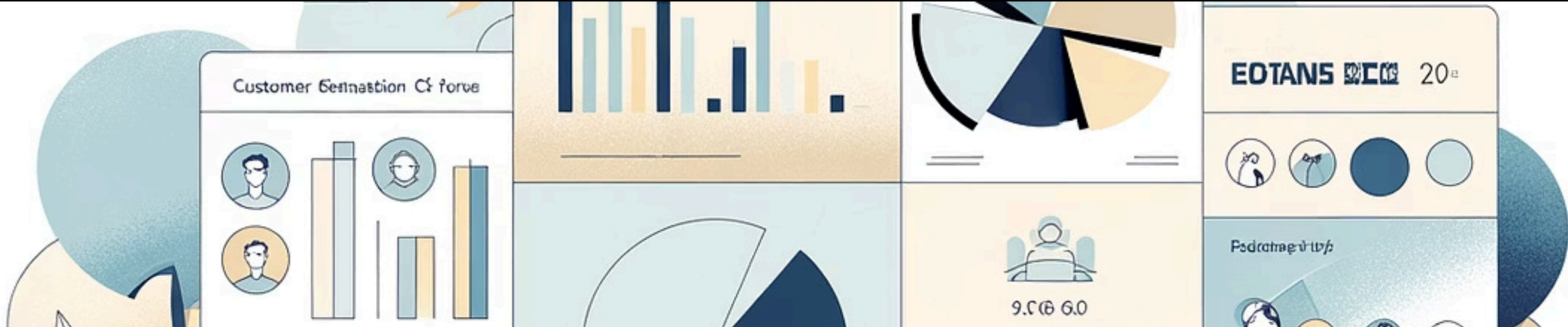Per transaction across the customer base

3.9K
Total Customers

Segmented by demographics, behavior, and loyalty

3.75
Avg Rating

Customer satisfaction across product categories

Revenue Drivers: Segment Deep Dive

By Gender

Male customers generate $157.9K (68% of revenue)

Female customers contribute $75.2K (32% of revenue)

Opportunity: Develop gender-specific marketing strategies to increase female engagement

By Subscription Status

Non-subscribers: 2,847 customers, $170.4K total revenue, $59.87 avg spend

Subscribers: 1,053 customers, $62.6K total revenue, $59.49 avg spend

Insight: Subscription model needs value refinement to compete with standard purchasing

Made with GAMMA
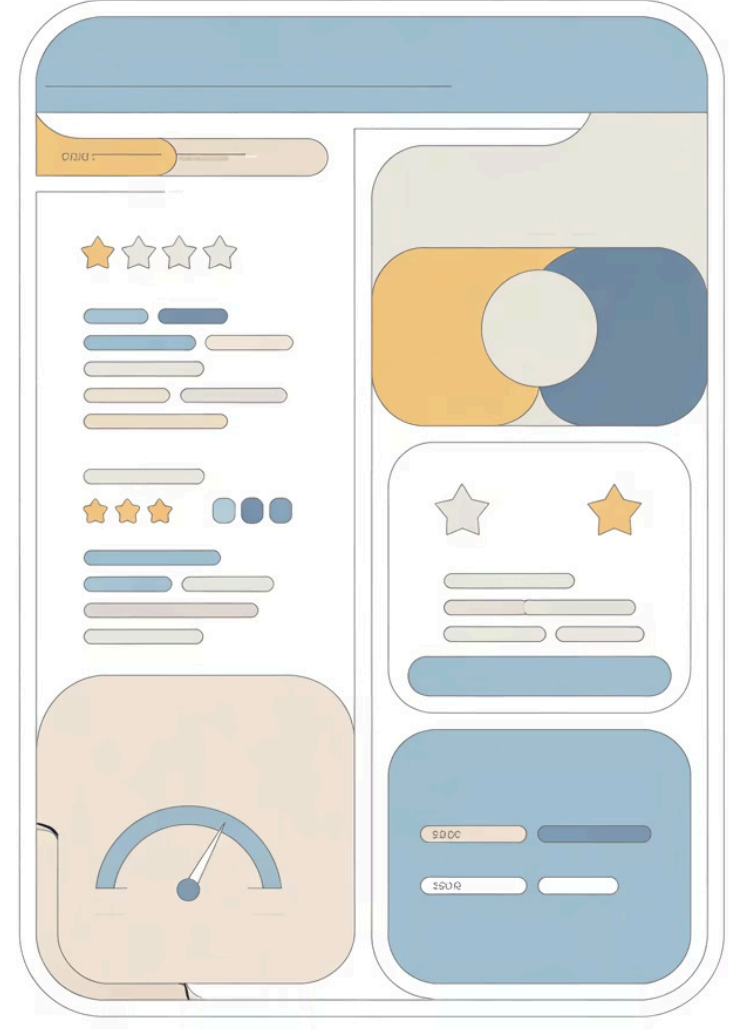
Product Performance & Customer Loyalty

Top-Rated Products

- Gloves (3.86 rating)
- Sandals (3.84 rating)
- Boots (3.82 rating)
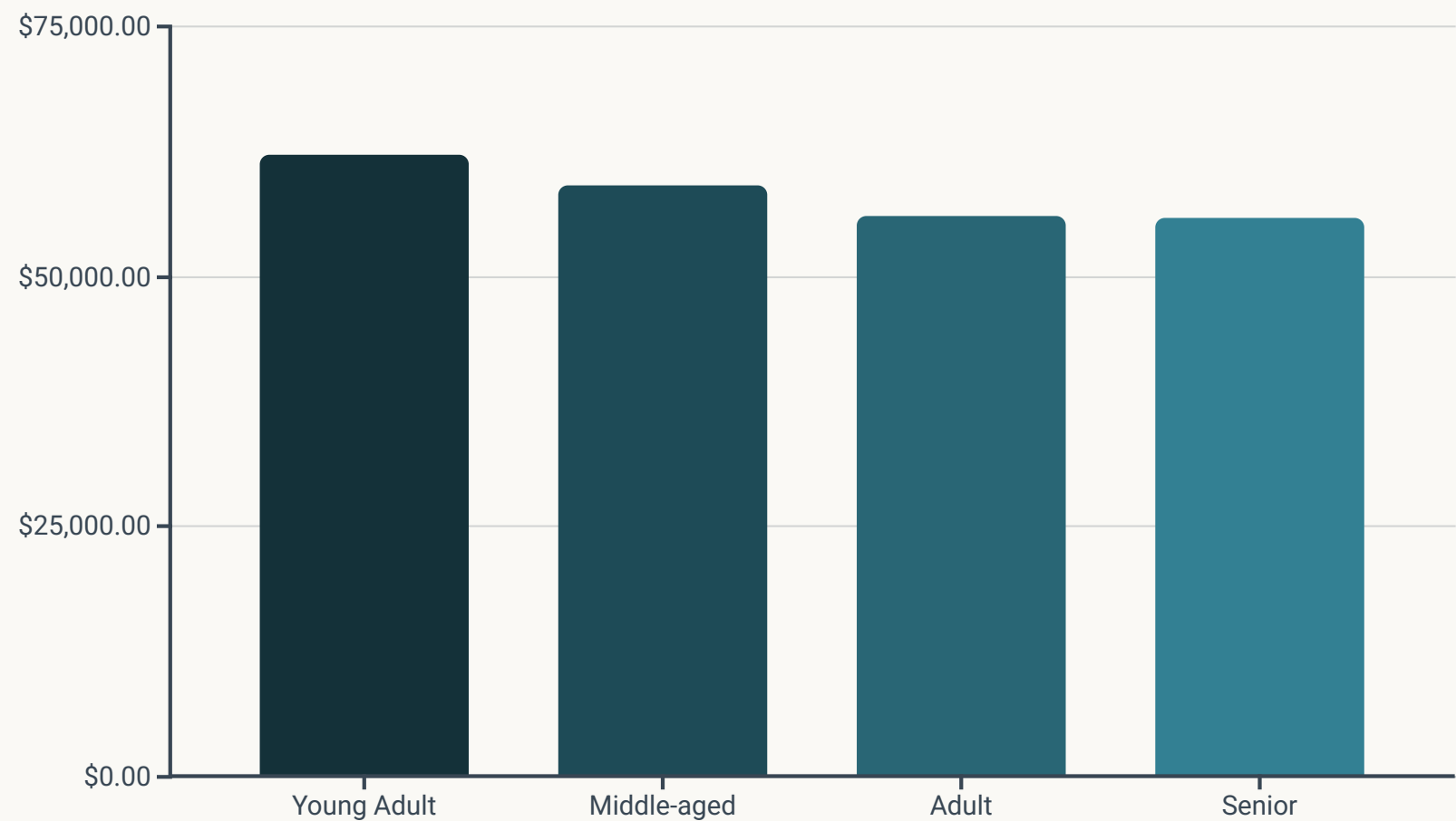- Hat (3.80 rating)
- Skirt (3.78 rating)

Customer Loyalty Tiers

- Loyal: 3,116 customers (85%)
- Returning: 701 customers (13%)
- New: 83 customers (2%)

Strong base—focus on moving Returning to Loyal

Age & Revenue: The Young Adult Advantage

Young Adults drive 27% of total revenue—concentrate digital marketing and social campaigns on this high-value segment.

Behavioral Insights: Shipping, Payment & Repeat Purchases

Express Shipping Premium

Express users spend $60.48 avg vs. Standard $58.46—2% higher AOV and stronger loyalty signals

Digital Payment Engagement

PayPal, Debit, and Credit Card users average 26 lifetime purchases vs. Cash (25)—digital = repeat buyers

Repeat Buyer Threshold

958 customers with 5+ purchases show higher subscription intent—target with loyalty incentives

Strategic Recommendations

1 **Refine Segmentation Strategy**

Target high-value Young Adults and male customers with personalized campaigns and category-specific offers

2 **Strengthen Loyalty Programs**

Redesign subscription value; reward repeat buyers and digital payment users with exclusive benefits

3 **Optimize Product Portfolio**

Prioritize top-rated categories in marketing; investigate low-rated items to address quality/expectation gaps

4 **Promote Express Shipping**

Offer incentives for express shipping adoption to increase AOV and repeat purchase frequency

Next Steps & Resources

Project Artifacts Available

Complete technical analysis, Python notebooks, SQL queries, and Power BI dashboard accessible via GitHub repository.

Connect & Learn More:

- [**GitHub Repository**](#)
- [**Author's LinkedIn Profile**](#)

Key Takeaway

Transactional data transformed into **strategic intelligence** to drive measurable growth and competitive advantage.