

Customer Shopping Behavior Analysis

Uncovering insights from 3,900 purchases to guide strategic decisions



Dataset at a Glance

3.9K

Total Purchases

18

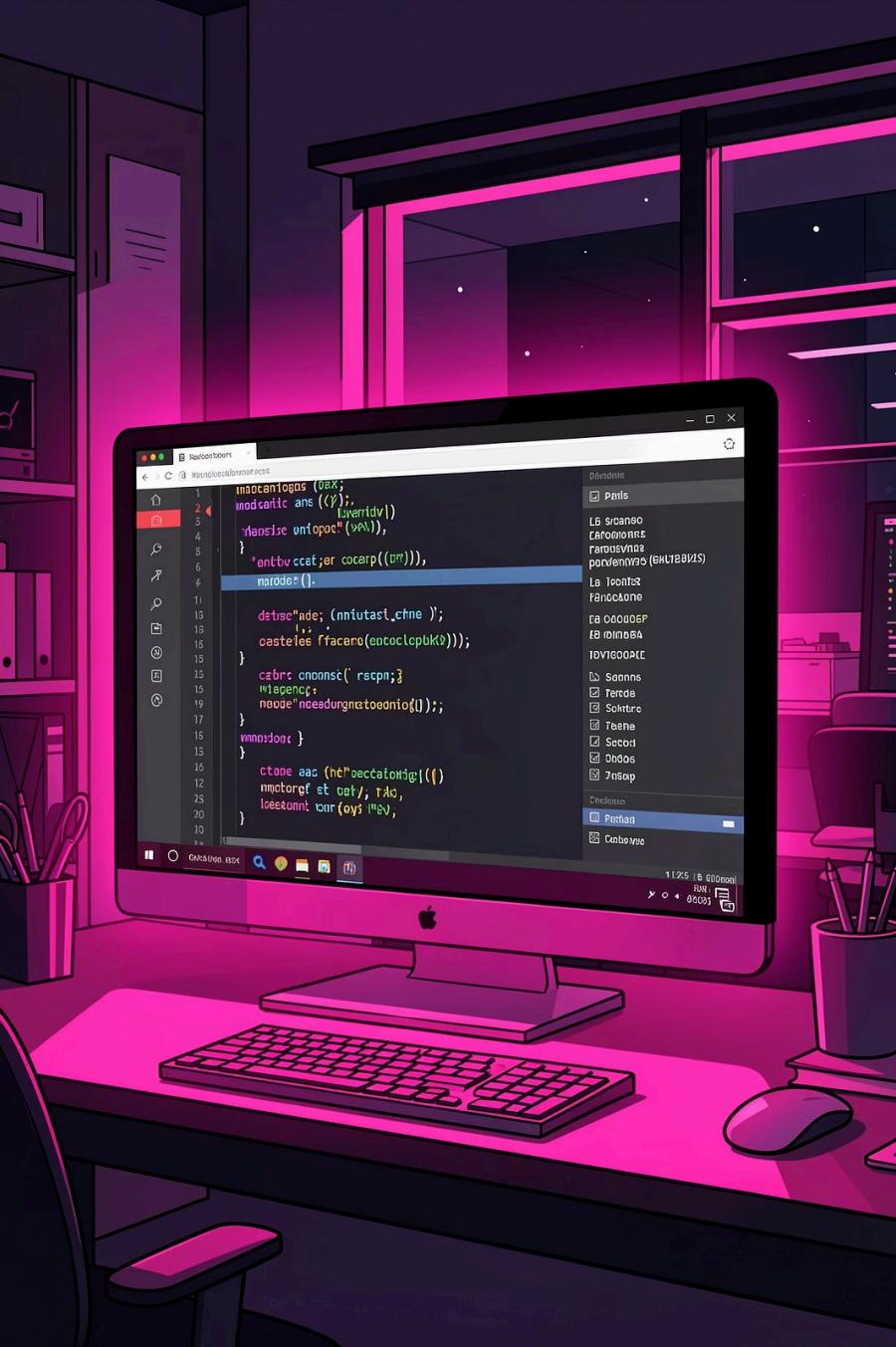
Data Features

50

Locations

Key Data Points

- Customer demographics & purchase history
- Product details across 4 categories
- Shopping behavior & review ratings
- Subscription & shipping preferences



ANALYSIS

Data Preparation in Python

01

Data Loading

Imported dataset using pandas

02

Initial Exploration

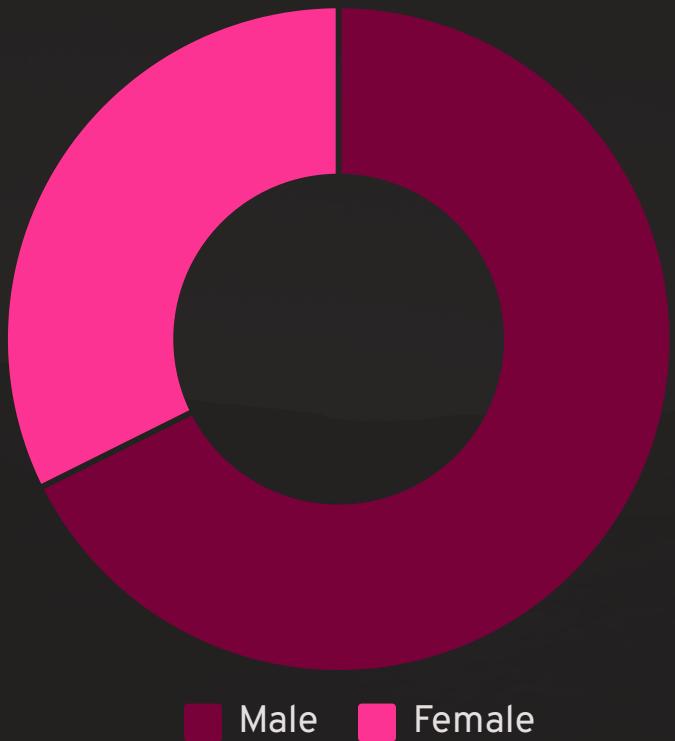
Checked structure with df.info()
and summary stats

03

Data Cleaning

Handled 37 missing values in Review Rating

Revenue Insights by Gender



Male Customers Drive Revenue

Male shoppers generate 68% of total revenue, representing a significant opportunity for targeted marketing campaigns.

Female segment shows potential for growth through personalized engagement strategies.

Top Performing Products



Gloves

Highest rating: 3.86 stars



Sandals

Strong rating: 3.84 stars



Boots

Excellent rating: 3.82 stars



Hat

Great rating: 3.80 stars



SHIPPING

Shipping Type Impact

Express Shipping

\$60.48 avg purchase

Standard Shipping

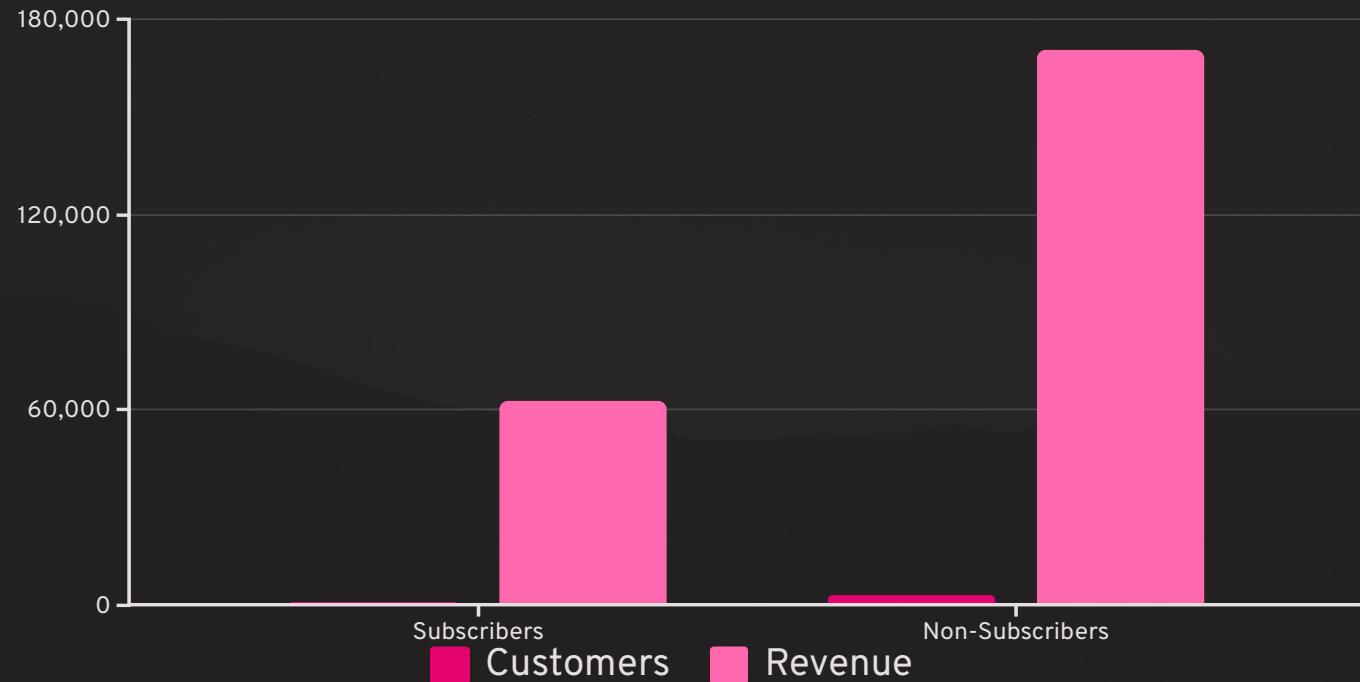
\$58.46 avg purchase

Key Finding

Express shipping customers spend 3.5% more on average, indicating higher purchase intent and willingness to pay premium.

Consider promoting express options to boost revenue per transaction.

Subscription Status Analysis

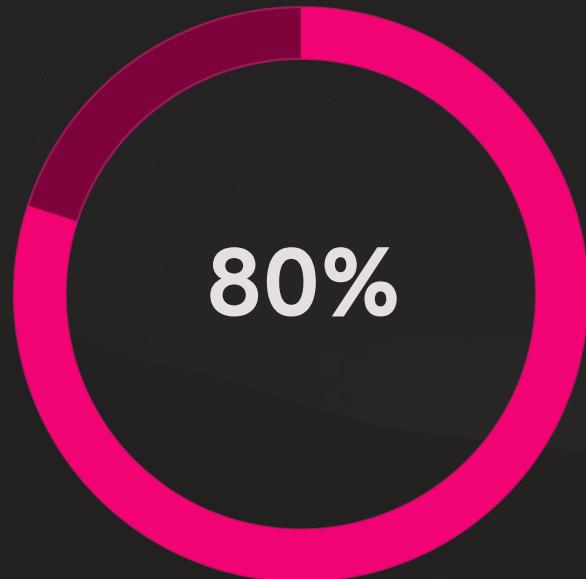


Subscription Opportunity

Only 27% of customers subscribe, yet they maintain similar spending patterns (\$59.49 vs \$59.87).

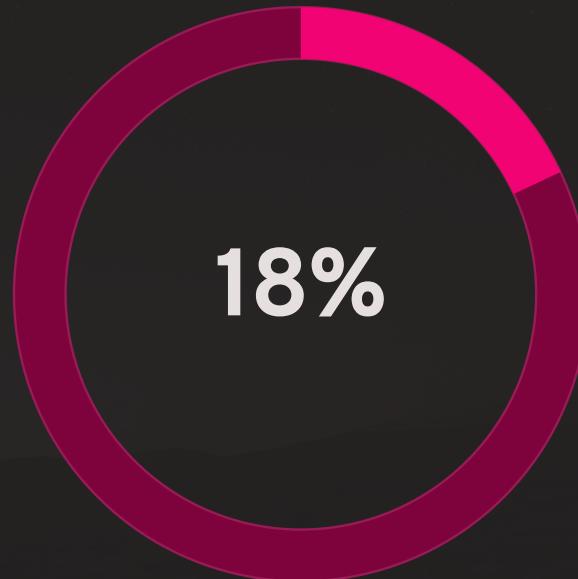
Massive growth potential: converting more customers to subscriptions could stabilize revenue streams.

Customer Segmentation



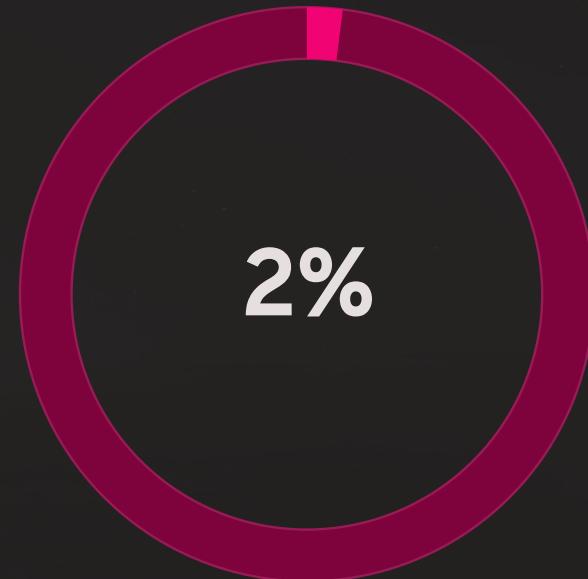
Loyal Customers

3,116 customers with strong repeat
behavior



Returning

701 customers showing growth
potential



New

83 first-time purchasers to nurture

Revenue by Age Group



Balanced Demographics

Revenue distributed evenly across age groups, with young adults leading slightly.

Multi-generational appeal creates stable customer base and diverse marketing opportunities.

RECOMMENDATIONS

Strategic Next Steps

1

Boost Subscriptions

Promote exclusive benefits to convert 73% non-subscribers

2

Loyalty Programs

Reward repeat buyers to strengthen 80% loyal segment

3

Review Discounts

Balance sales growth with margin control

4

Product Positioning

Highlight top-rated items in marketing campaigns

5

Targeted Marketing

Focus on high-revenue segments and express shipping users