

Customer Shopping Behavior Analysis

Uncovering insights from 3,900 purchases to guide strategic decisions



OVERVIEW

Dataset at a Glance

3.9K

Total Purchases

18

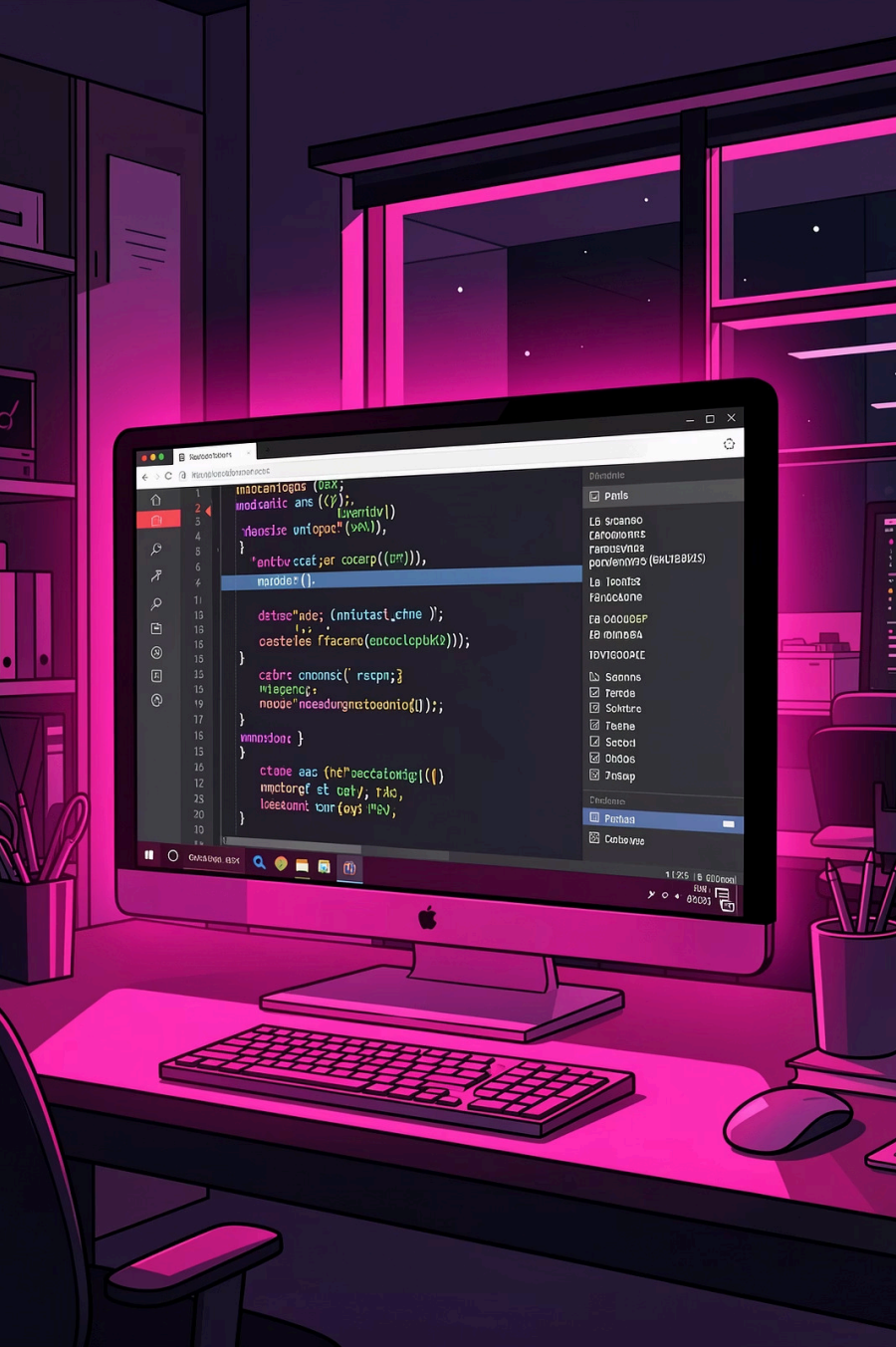
Data Features

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

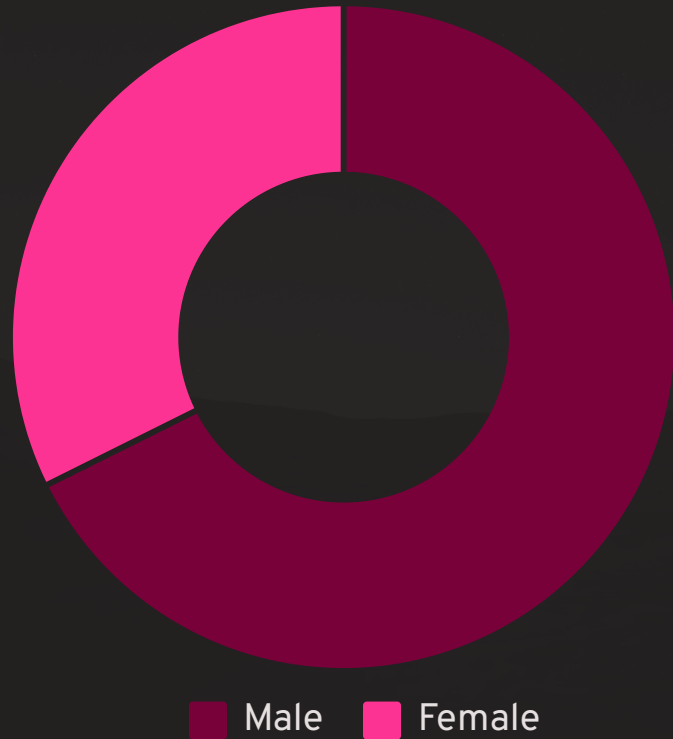
Checked structure with `df.info()` and summary stats

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

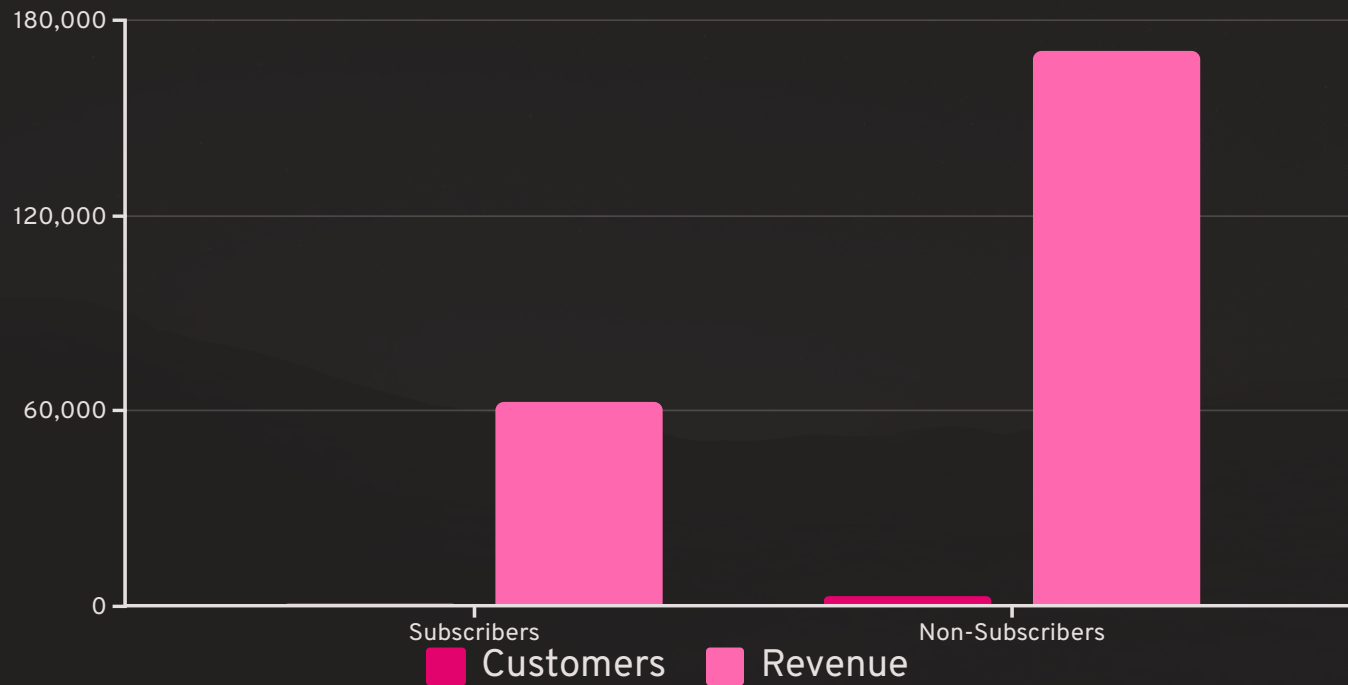
\$58.46 avg purchase

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

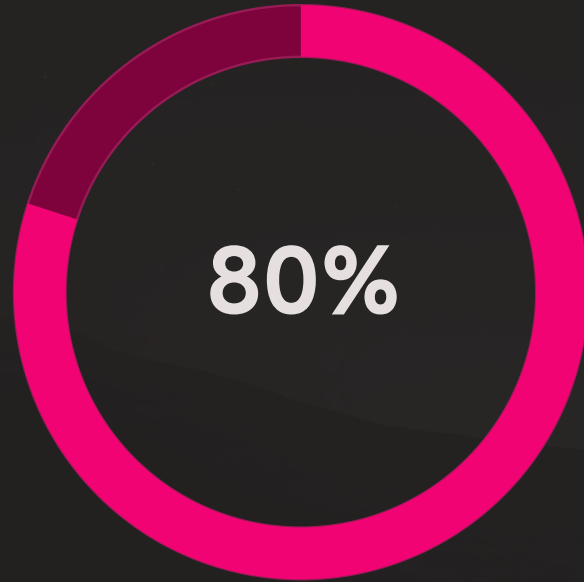


Subscription Opportunity

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

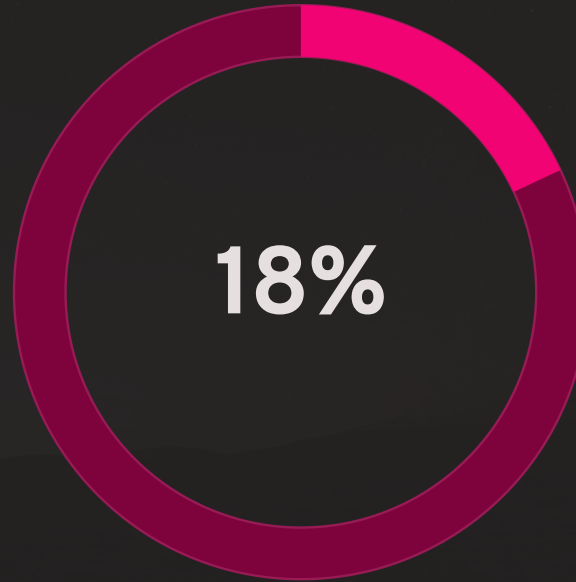
Massive growth potential: converting more customers to subscriptions could stabilize revenue streams.

Customer Segmentation



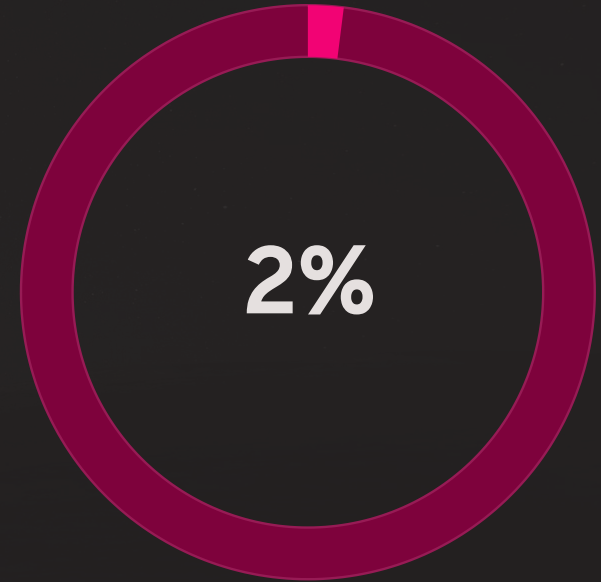
Loyal Customers

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.

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