



# Customer Shopping Behavior Analysis

Uncovering insights from 3,900 purchases to guide strategic business decisions



# Dataset Overview

3,900

Total Purchases

Comprehensive transaction data

18

Data Columns

Customer demographics & behavior

37

Missing Values

Only in Review Rating column

# Data Preparation Process

1

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## Data Loading

Imported dataset using pandas

2

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## Initial Exploration

Structure check and summary statistics

3

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## Missing Data Handling

Imputed Review Rating with median values

4

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## Feature Engineering

Created age groups and purchase frequency

5

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## Database Integration

Connected to PostgreSQL for analysis

# Revenue by Gender Analysis



## Key Insight

Female customers generate slightly higher total revenue than male customers

- Gender-based marketing strategies could optimize revenue streams





# High-Value Discount Users

Customers using discounts while spending above average

## Smart Shoppers

High spenders who maximize value with discounts

## Strategic Opportunity

Target premium customers with exclusive offers



F 0.5 star



For ve Star



5 5.5star



Clothing cders



5 5.Star

Clothers reviews — product reviews  
product in nne ahamns calors

## Top-Rated Products



Blouse

Highest customer satisfaction



Dress

Consistently excellent reviews



Shirt

Strong customer approval

# Shipping Preferences Impact

Express Shipping

\$65

Average purchase amount

Standard Shipping

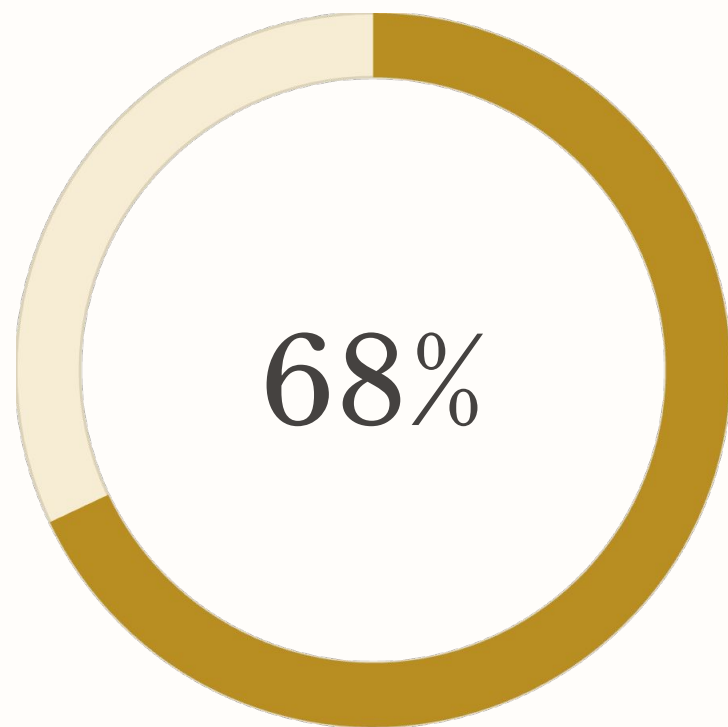
\$58

Average purchase amount

Express shipping customers spend 12% more per transaction

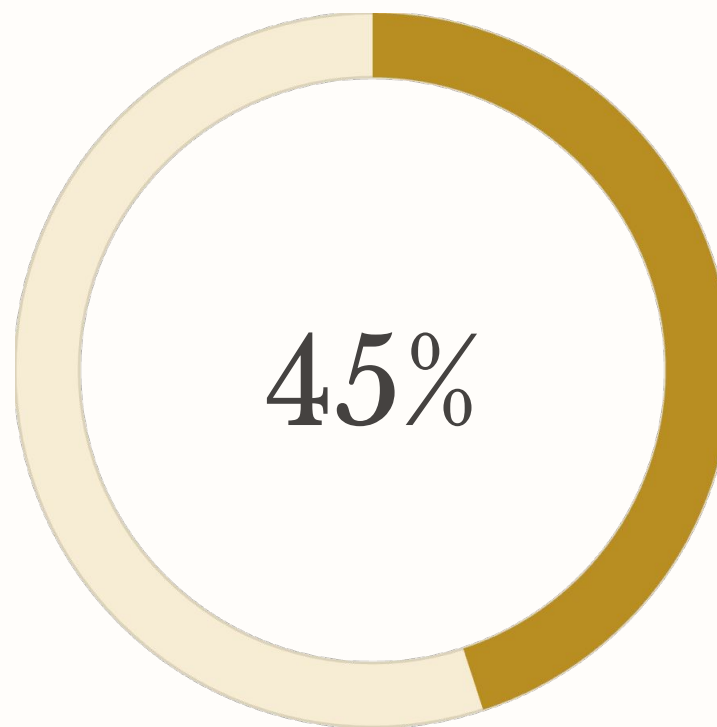


# Subscription Impact



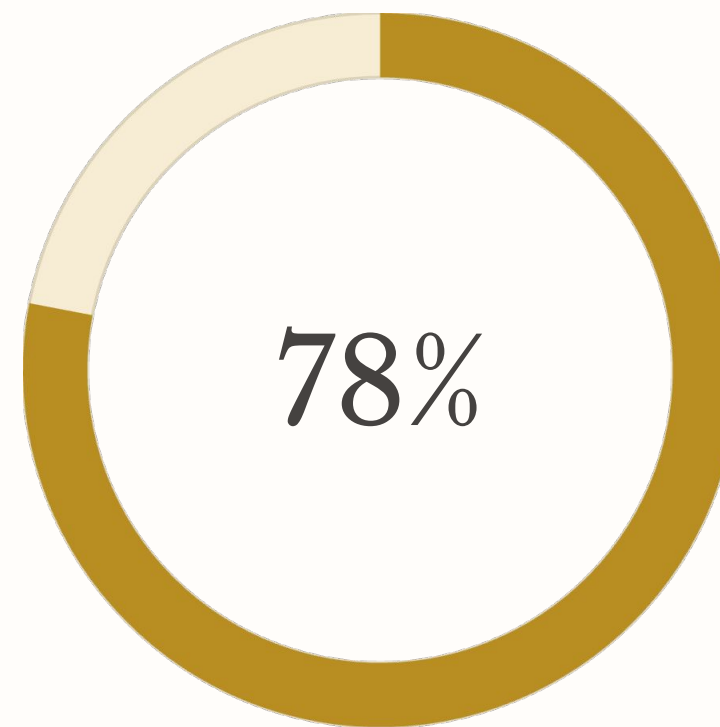
Higher Spend

Subscribers vs non-subscribers



Revenue Share

From subscription customers

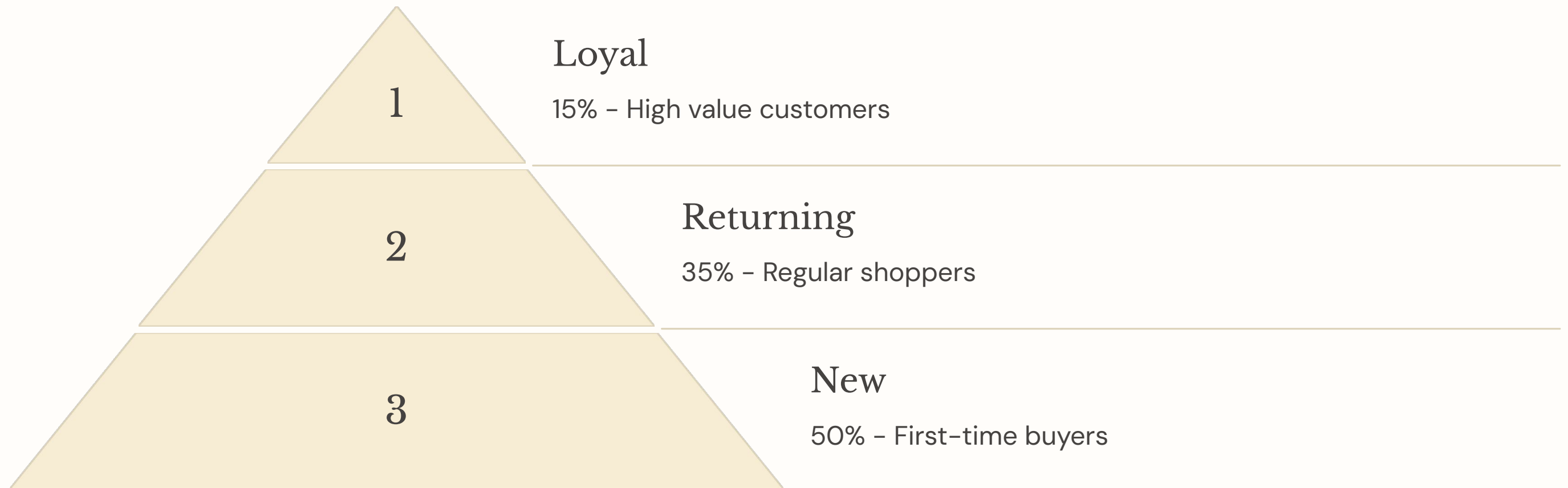


Loyalty Rate

Repeat purchase frequency



# Customer Segmentation



Focus on converting New to Returning, Returning to Loyal



# Strategic Recommendations



## Boost Subscriptions

Promote exclusive benefits for subscribers



## Loyalty Programs

Reward repeat buyers to increase retention



## Targeted Marketing

Focus on high-revenue segments and express users



## Product Positioning

Highlight top-rated products in campaigns