Customer Shopping Behavior Analysis

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

Made with GAMMA

DATASET OVERVIEW

The Foundation

3,900

Total Purchases

Transactions analyzed across all categories

20

Data Points

Features per customer transaction

$59.76

Average Spend

Per customer purchase

50

Locations

Geographic coverage

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DATA PREPARATION

Python Analysis Pipeline

01

Data Loading & Exploration

Imported dataset, checked structure with pandas

02

Missing Data Handling

Imputed 37 missing review ratings using median

03

Feature Engineering

Created age groups, purchase frequency, customer status

04

Data Standardization

Renamed columns, removed redundant fields

05

Database Integration

Loaded cleaned data into SQL Server

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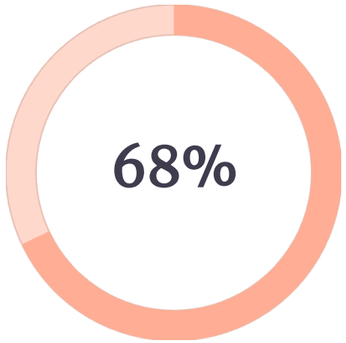
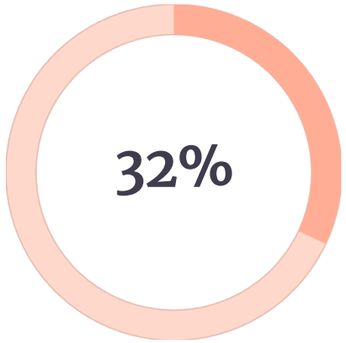
REVENUE INSIGHTS

Gender & Spending Patterns



Male Revenue

$157,890 total spend



Female Revenue

$75,191 total spend

Male customers generate more than double the revenue of female customers

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Top Performing Products

Gloves

Highest rated: 3.86 stars

Sandals

Second place: 3.84 stars

Boots

Strong performer: 3.82 stars

Hat

Popular choice: 3.80 stars

Skirt

Top five: 3.78 stars

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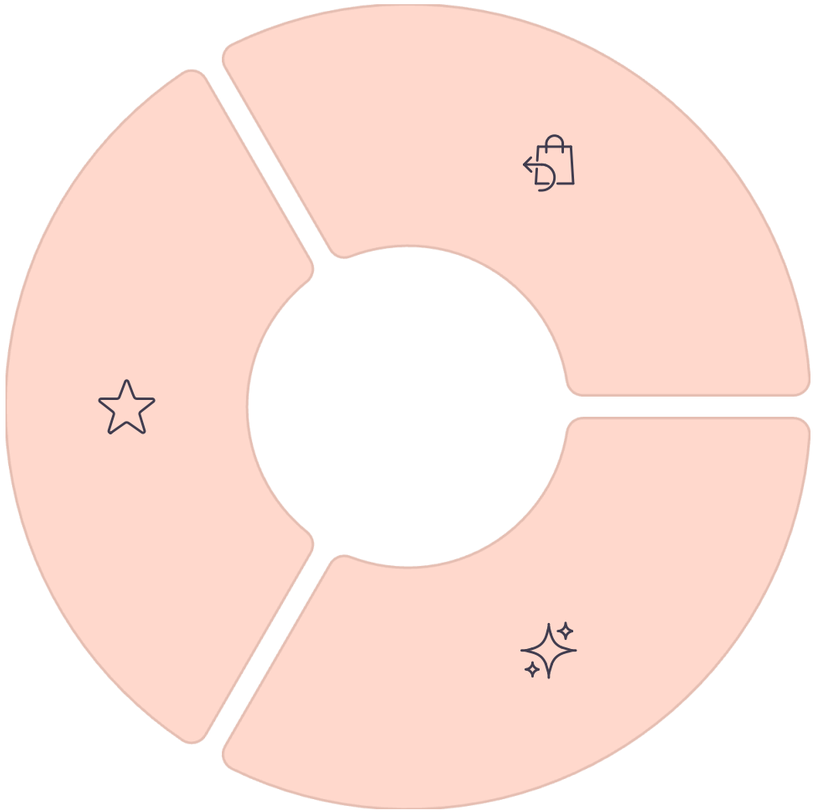
CUSTOMER SEGMENTS

Who Are Our Customers?

Loyal

3,116 customers (80%)

Frequent repeat purchases



Returning

701 customers (18%)

Multiple purchases made

New

83 customers (2%)

First-time buyers

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Subscription Status Analysis

27%

Subscribers

1,053 customers, $59.49 avg spend

73%

Non-Subscribers

2,847 customers, $59.87 avg spend

Key Finding: 958 repeat buyers (>5 purchases) are subscribers

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REVENUE BREAKDOWN

Age Group Performance

Young Adult

$62,143 revenue

Highest contributor

Middle-aged

$59,197 revenue

Strong segment

Adult

$55,978 revenue

Consistent spenders

Senior

$55,763 revenue

Stable market

Discount Strategy Insights

High-Discount Products

- Hat: 50% discount rate
- Sneakers: 49.66%
- Coat: 49.07%
- Sweater: 48.17%
- Pants: 47.37%

839 customers used discounts but spent above average ($60+)

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ACTION PLAN

Strategic Recommendations

Boost Subscriptions

Promote exclusive benefits to convert non-subscribers

Loyalty Programs

Reward repeat buyers to increase loyal segment

Review Discount Policy

Balance sales growth with margin control

Product Positioning

Highlight top-rated items in marketing campaigns

Targeted Marketing

Focus on high-revenue age groups and express shipping users

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