



# E-Commerce Customer Behavior Analysis

Uncovering insights from transactional data to drive strategic growth.



# Analysis Objectives & Problem

## Core Objectives

- Analyze spending patterns & segmentation.
- Identify product preferences & subscription trends.
- Support data-driven decision-making.
- Optimize marketing and retention.

## Problem Statement

Retailer seeks to understand changing shopping behavior across demographics and channels.

Which factors (discounts, reviews, seasons) drive consumer decisions and repeat purchases?

# Revenue by Gender

## Female Customers

**\$75,191** Revenue (32.27% of Total)

Average Spend: **\$60.25**

Top Categories: Clothing, Accessories, Footwear

## Male Customers

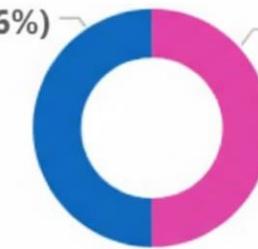
**\$157,000+** Revenue (67.72% of Total)

Average Spend: **\$59.25** (Similar to Female)

Top Categories: Clothing, Accessories, Footwear

REVENUE By GENDER

\$15.19K (75.26%) ↗ **BLUE: \$157.89K**



● **BLUE: \$15.89K (67.74%)**

● **PINK: \$15.19K (32.26%)**

# Top Rated Products

Products with the highest average review ratings.

**3.86**

**Gloves**

Highest Average Rating

**3.84**

**Sandals**

Second Highest

**3.82**

**Boots**

Third Highest

**3.80**

**Hat**

Fourth Highest

**3.78**

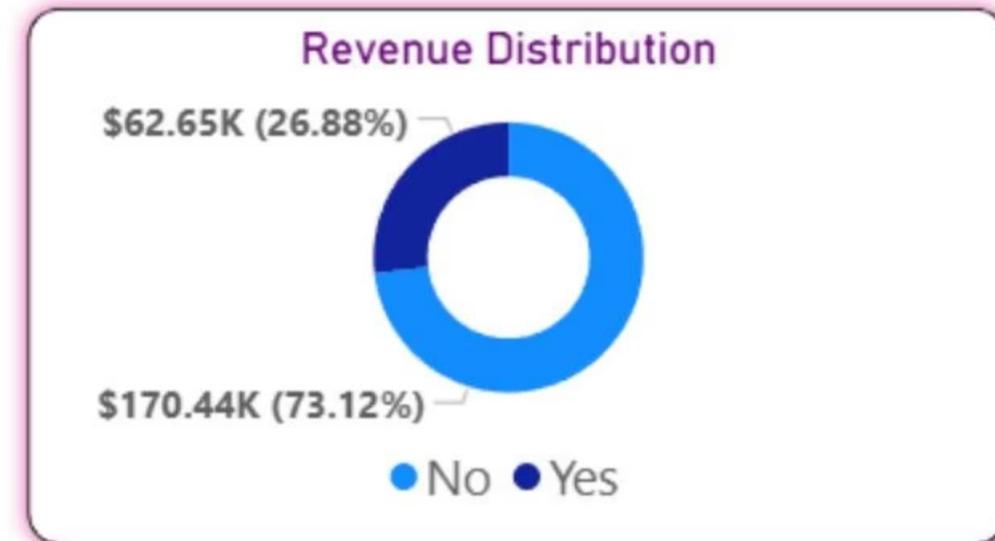
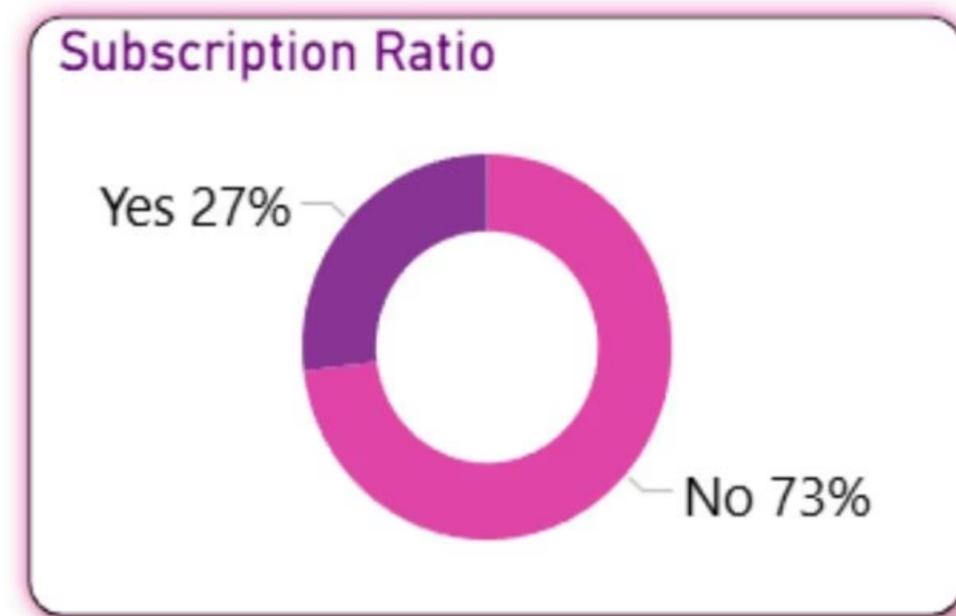
**Skirt**

Fifth Highest

# Subscribers vs. Non-Subscribers

27% of total customers have a subscription.

Revenue Distribution:



## Subscriber Insights

**1053**  
number of customer

**\$59.49**  
Average Purchase...

**3.75**  
Average review Rating

**63K**  
Total Revenue

## Non-Subscriber Insights

**2847**  
number of customer

**\$59.87**  
Average Purchase...

**3.75**  
Average review Rating

**170K**  
Total Revenue

# Customer Segmentation

Segments based on the number of purchases.

**Loyal**

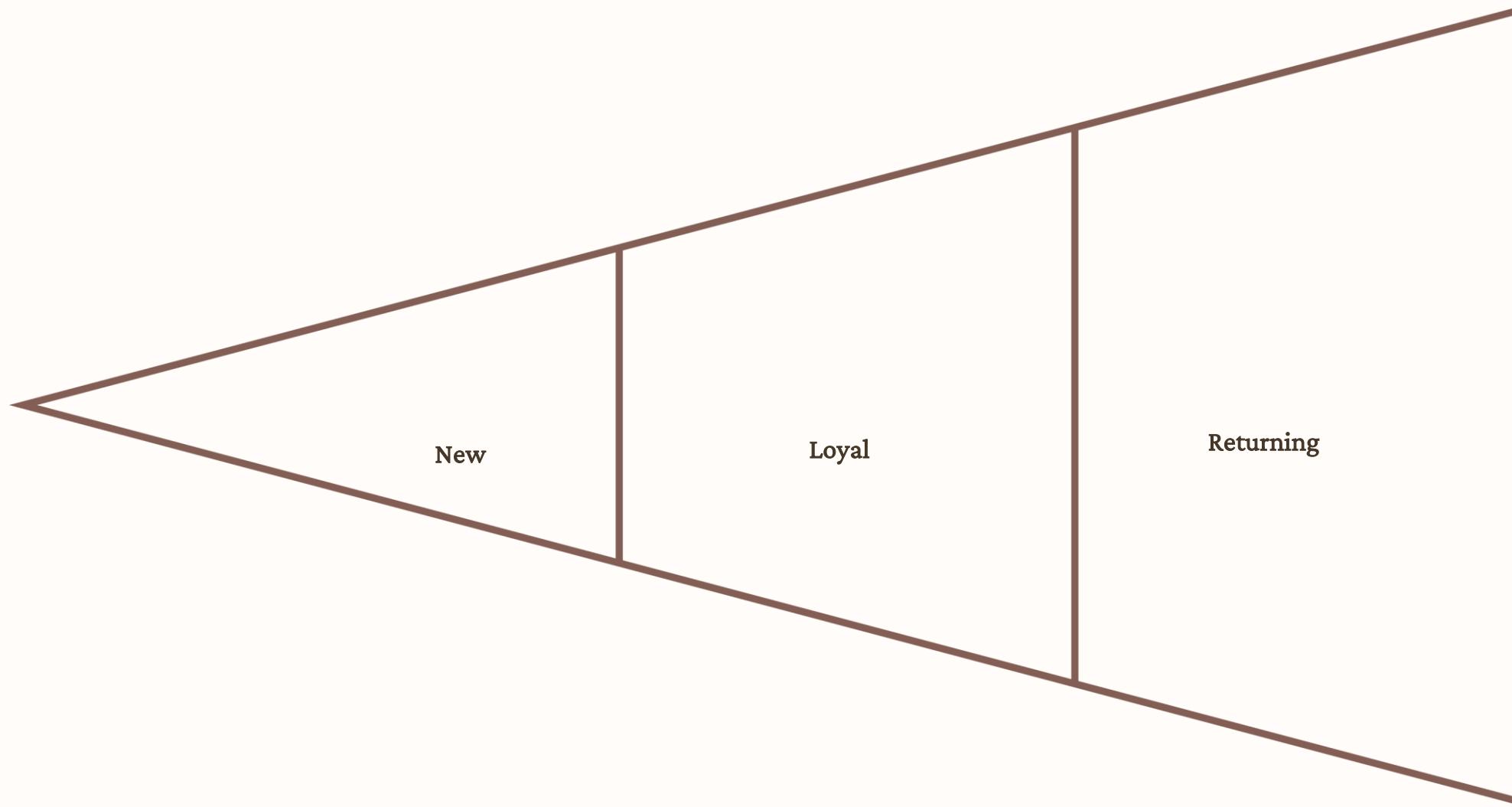
3,116 Customers (10+ purchases)

**Returning**

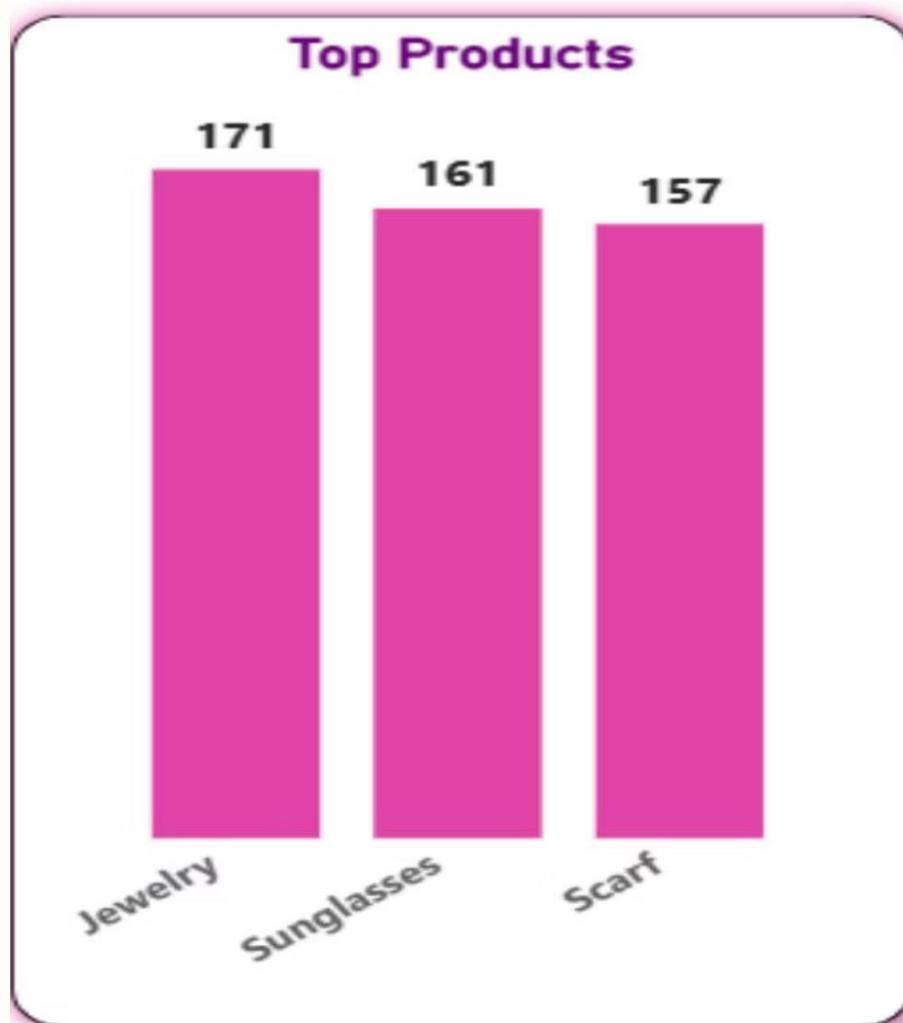
701 Customers (2–10 purchases)

**New**

83 Customers (1 purchase)



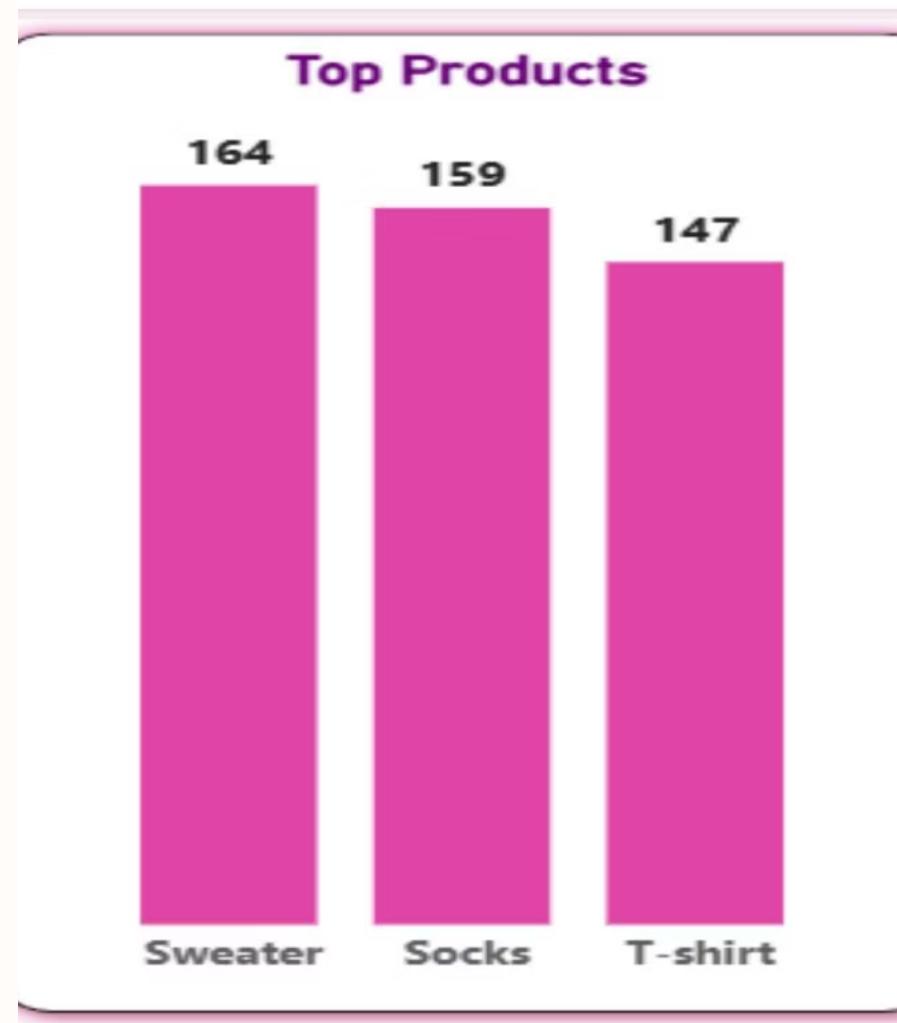
# Top Products by Category



## Accessories

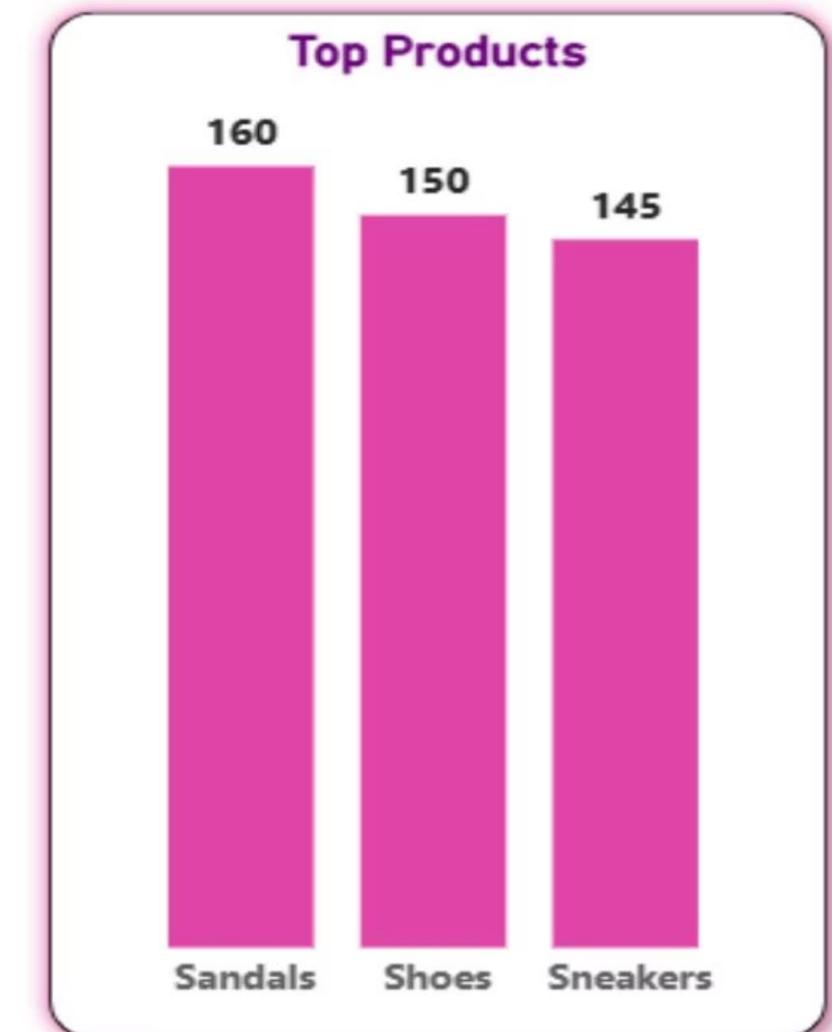
Jewelry, Sunglasses, Belt

Outerwear leaders: Jacket and Coat.



## Clothing

Blouse, Pants, Shirt



## Footwear

Sandals, Shoes, Sneakers

# Discount Dependency & Shipping

## Discount-Dependent Products

Highest percentage of discounted purchases:

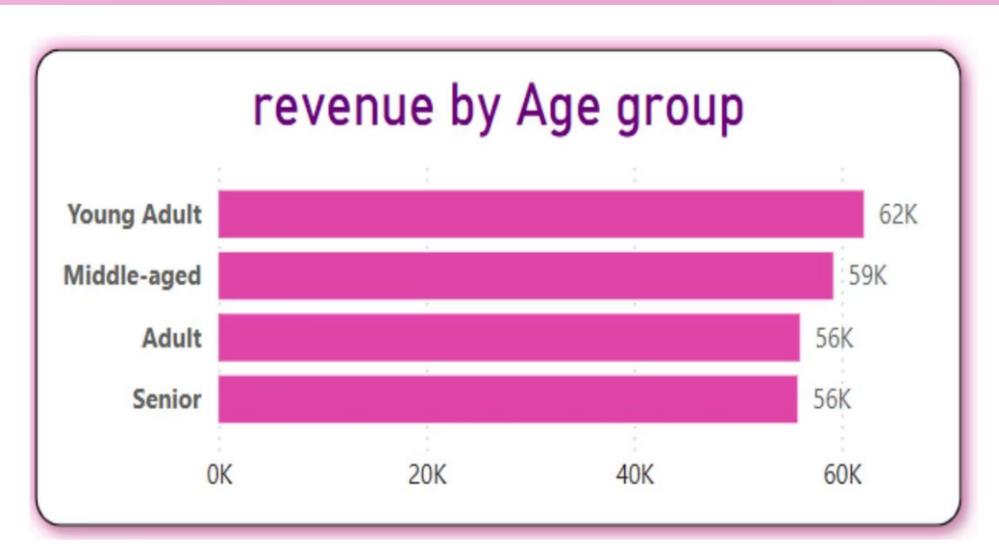
- Hat (50.00%)
- Sneakers (49.66%)
- Coat (49.07%)
- Sweater (48.17%)
- Pants (47.37%)

## Shipping Type Comparison

Standard	\$58.46 AOV
Express	\$60.48 AOV

Express users have a slightly higher Average Order Value (AOV).

# Key Performance Indicators (KPIs)



1

## Revenue & AOV by Gender

Male: \$157K (67.7%); Female: \$75K (32.3%). AOV is similar (\$59.25 vs \$60.25).

2

## Top Categories & Products

Clothing, Accessories, Footwear. Top Rated: Gloves (3.86).

3

## Subscription & Loyalty

27% Subscription Rate. Loyal Customers are those with 10+ purchases.

4

## Shipping & Discounts

Express AOV is higher. Hat and Sneakers are most discount-dependent.



## Business Recommendations



### Boost Subscriptions

Promote exclusive benefits to increase the 27% rate.



### Customer Loyalty

Reward repeat buyers to grow the "Loyal" segment.



### Review Discount Policy

Balance sales boosts with margin control on dependent products.



### Targeted Marketing

Focus on high-revenue age groups and Express users.