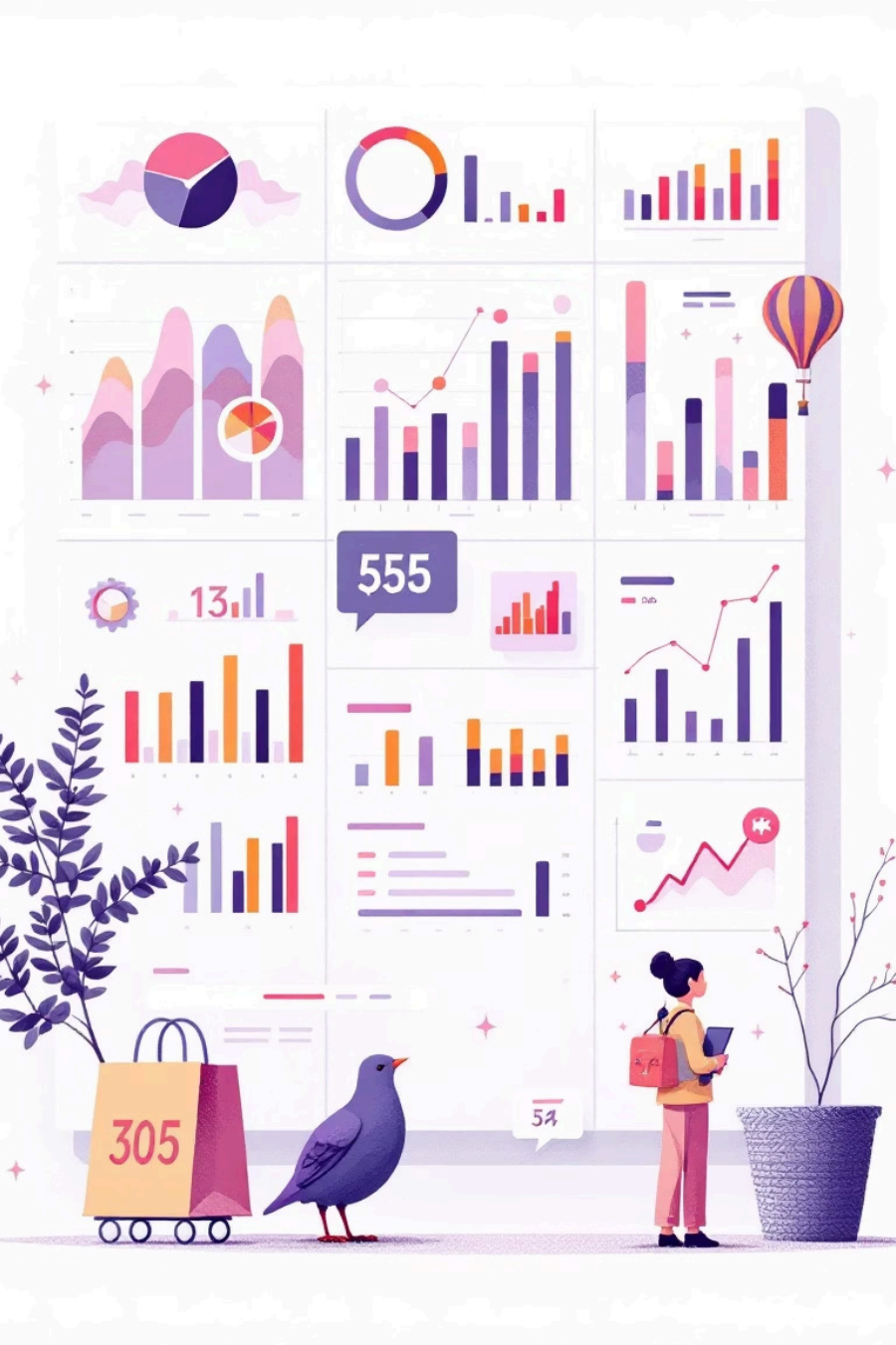# Customer Shopping Behaviour Analysis

Analyzing 3,900 purchases to uncover spending patterns, customer segments, and strategic insights

Dataset Overview

3,900

Total Purchases

Transactions analyzed across all categories

18

Data Points

Comprehensive customer and purchase attributes

4

Product Categories

Clothing, Footwear, Accessories, Outerwear

50

Locations

Geographic diversity across customer base

$59.76

Average Purchase Amount

Analysis Workflow

01

Data Cleaning & Preparation (Python)

Cleaned the dataset, handled missing values, and created useful features for analysis.

02

Data Manipulation and Insights (SQL)

Performed business-focused queries to uncover spending patterns, customer segments, and product performance.

03

Data Visualization and Dashboarding (Power BI)

Designed an interactive dashboard with KPIs and charts to present key insights clearly.

04

Reporting

Compiled insights and recommendations into a professional final report.

Insight Visualization

Interactive visualizations summarizing customer behavior, spending trends, and product performance.

Customer Segmentation Insights

Loyal Customers

3,116 customers

80% of customer base shows strong loyalty
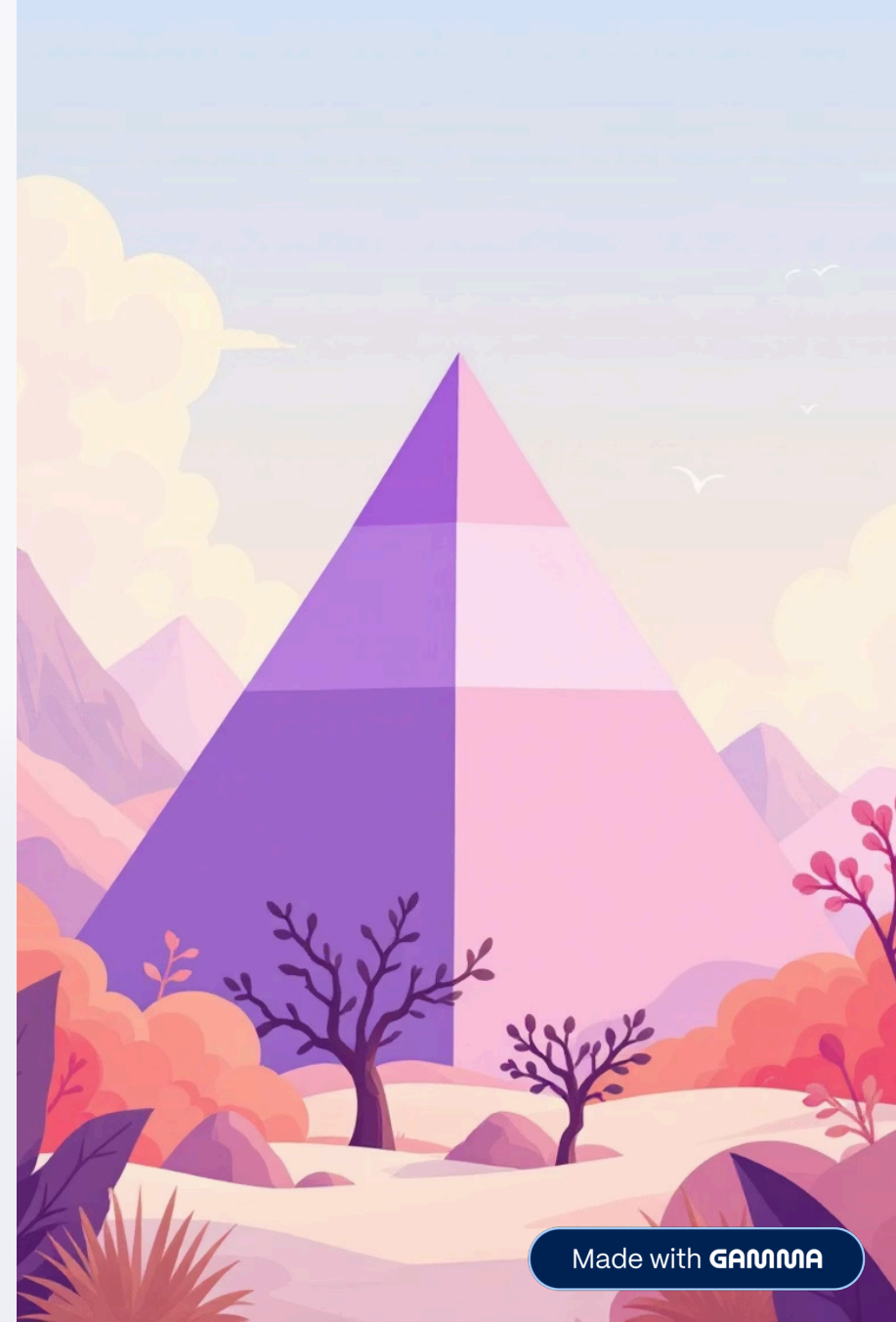
Returning Buyers

701 customers

18% making repeat purchases

New Customers

83 customers

2% first-time buyers

Opportunity: Convert returning buyers into loyal segment through targeted engagement
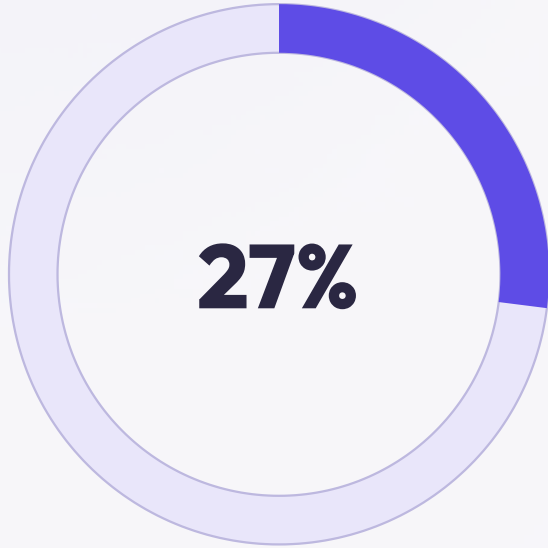
Top Performing Products

Highest Rated Items

1. Gloves - 3.86 rating
2. Sandals - 3.84 rating
3. Boots - 3.82 rating
4. Hat - 3.80 rating
5. Skirt - 3.78 rating

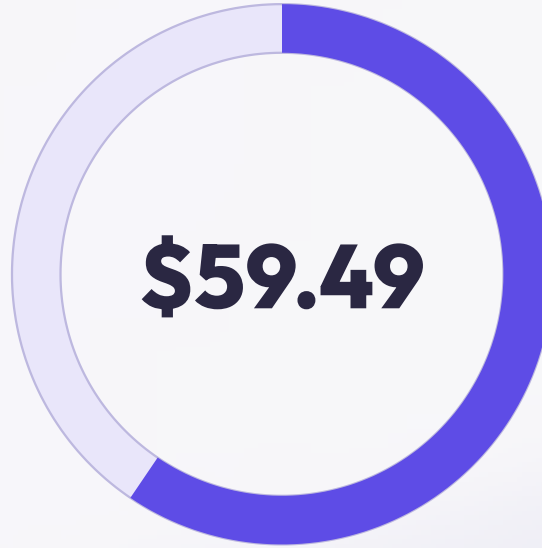## Most Purchased by Category

- **Accessories:** Jewelry (171 orders)
- **Clothing:** Blouse & Pants (171 orders each)
- **Footwear:** Sandals (160 orders)
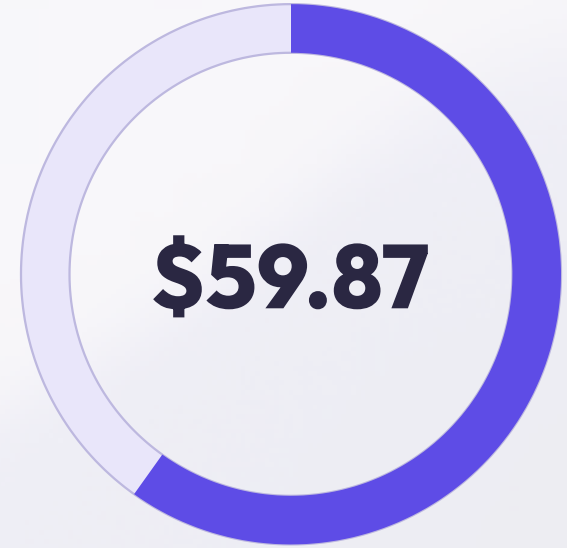
Subscription Analysis

27%

Subscription Rate

1,053 of 3,900 customers subscribed

$59.49

Subscriber Avg Spend

Slightly lower than non-subscribers

$59.87

Non-Subscriber Spend

Higher average purchase amount

Repeat Buyers & Subscriptions: 958 subscribers have 5+ purchases vs 2,518 non-subscribers

Discount Impact Analysis

`████████░░░░░░░░░░░░░░░░░` **29%**

Revenue from Discounts

$67,604 generated with discount applied

High-Value Discount Users

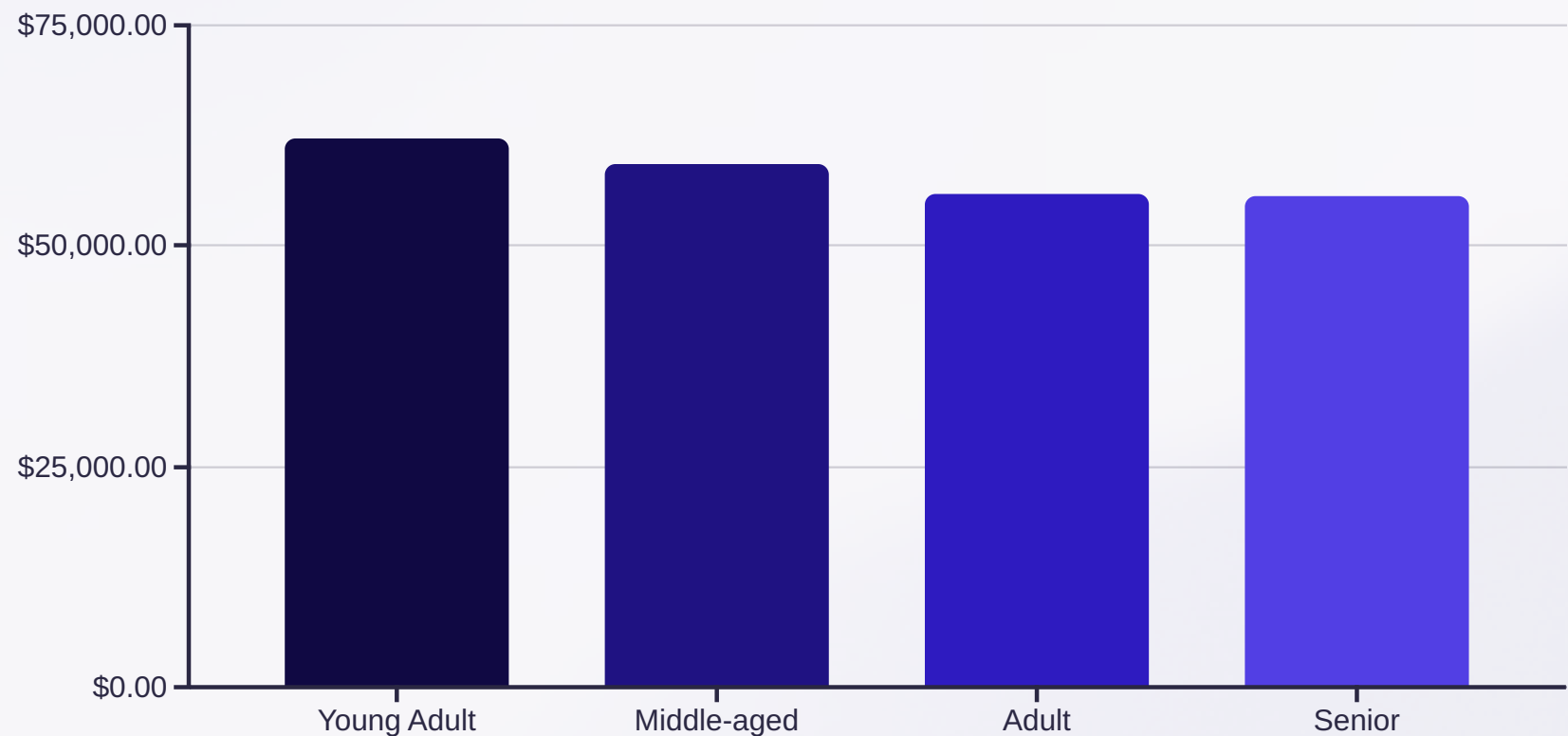Many customers using discounts still spend above average ($60+)

`████████████░░░░░░░░░░░░░` **43%**

Discount Usage Rate

1,677 of 3,900 purchases used discounts

Discount-Dependent Products

Hats (50%), Sneakers (49%), Coats (49%) most discounted

Revenue by Age & Shipping

Young adults lead revenue generation. Express shipping users show higher average purchase amounts than standard shipping.

Strategic Recommendations

Boost Subscriptions

Promote exclusive benefits to increase 27% subscription rate

Loyalty Programs

Reward repeat buyers to convert into loyal segment

Optimize Discounts

Balance sales growth with margin control

Targeted Marketing

Focus on high-revenue age groups and express shipping users

Product Positioning

Highlight top-rated items in campaigns