

Project Summary: Customer Shopping Behavior

Attribute	Detail
Project Title	Customer Shopping Behavior
Data Source	customer_shopping_behavior.csv
Analyst	Adithya Vinod
Tools Used	PostgreSQL (SQL), Python (Jupyter Notebooks), Power BI

Key Insights

The data analysis revealed the following critical findings, supported by specific metrics:

- **Gender Revenue Disparity:** The analysis showed a notable disparity in total revenue contribution. **Female customers generated \$97,787**, while **Male customers generated \$32,870** in total revenue.
- **Subscription Value:** Subscribed customers consistently demonstrate significantly higher Average Purchase Amounts and Total Revenue compared to non-subscribers.
 - **Subscribers:** Average Spend of **\$61.64** and Total Revenue of **\$106,601**.
 - **Non-Subscribers:** Average Spend of **\$59.48** and Total Revenue of **\$24,056**.
- **Product Performance:** * The **top 5 products by average review rating** include **Scarf** (4.13), **Hat** (4.12), **Gloves** (4.11), **Coat** (4.09), and **Jewelry** (4.06).
 - The top 3 highest-volume purchased items within the **Clothing, Footwear, and Accessories** categories were identified, driving stock optimization recommendations.
- **Discount Effectiveness:** Discounts are effective in converting high-value customers, as a segment was identified who used discounts but still spent **above the average purchase amount of \$59.50**.
- **Customer Segmentation:** Customers were successfully segmented into three groups based on their Previous Purchases, providing a framework for targeted retention campaigns:
 - **Loyal** (Previous Purchases > 10): **1,858 customers**
 - **Returning** (Previous Purchases 2-10): **1,659 customers**
 - **New** (Previous Purchases = 1): **380 customers**

Actionable Recommendations

1. **Enhance Subscription Benefits:** Further strengthen the value proposition of the subscription service to drive sign-ups, potentially through exclusive early access to high-rated products.
2. **Optimize High-Volume Stock:** Ensure robust inventory management for the Top 3 purchased items in key categories to mitigate stock-out risks.
3. **Targeted Discounting:** Implement personalized discount tiers specifically designed for high-spending customers to maintain large basket sizes while offering incentives.
4. **Loyalty Campaign Development:** Focus retention strategies on the **Returning** customer segment to accelerate their migration to the high-value **Loyal** status.