Customer Shopping Behavior Analysis Report

1. Executive Summary

This report analyzes customer shopping behavior using transactional, demographic, and engagement data. The objective is to understand purchasing patterns, customer value, and preferences to support data-driven business decisions.

Key highlights:

- Total customers analyzed: **3,900**

- Average purchase value: **$59.76**

- Average review rating: **3.75 / 5**

- Majority of customers (**73%**) are **non-subscribers**

- Strong revenue contribution from **Clothing and Accessories**

- Customers aged **35–55** generate the highest revenue and sales volume

2. Dataset Overview

Dataset Size

- **Rows:** 3,900 customers

- **Columns:** 10 variables

Key Variables

Column Name	Description
Customer ID	Unique customer identifier
Age	Customer age (18–70)
Gender	Male / Female

Subscription Status	Yes / No
Category	Product category purchased
Purchase Amount (USD)	Transaction value
Review Rating	Customer rating (2.5 – 5.0)
Previous Purchases	Historical purchase count
Shipping Type	Delivery method
Payment Method	Mode of payment

3. Descriptive Statistics (Key Metrics)

Metric	Value
Average Age	44 years
Average Purchase Amount	$59.76
Minimum Purchase	$20
Maximum Purchase	$100
Average Review Rating	3.75
Avg. Previous Purchases	25

Insight: Customers show moderate satisfaction and repeat purchase behavior, indicating good retention potential.

4. Customer Segmentation Insights

◆ **Subscription Status**

- **Non-Subscribers:** 73%

- **Subscribers:** 27%

📌 *Opportunity:* Convert high-spending non-subscribers into paid subscribers using loyalty incentives.

◆ Gender-Based Spending

- Female Avg Spend: **~$60**

- Male Avg Spend: **~$59**

📌 *Insight:* Spending behavior is consistent across genders, suggesting neutral pricing strategies.

◆ Age Group Analysis

- Highest revenue from **35–55 age group**

- Younger customers (18–25) show lower spending

📌 *Insight:* Middle-aged customers are the most valuable segment.

5. Category Performance

Revenue by Category

1. **Clothing** – Highest revenue

2. **Accessories**

3. **Footwear**

4. **Outerwear**

Sales Volume by Category

- Clothing dominates both revenue and quantity

- Accessories have strong secondary performance

📌 *Recommendation:* Focus promotions and inventory optimization on Clothing and Accessories.

6. Payment & Shipping Preferences

Payment Method Distribution

- PayPal, Credit Card, and Cash are almost evenly used

- Bank Transfer slightly lower usage

📌 *Insight:* Customers prefer flexible payment options—maintain all methods.

Shipping Types

- Standard & Free Shipping are most popular

- Express & Next Day Air used less frequently

📌 *Recommendation:* Offer targeted express shipping discounts for high-value customers.

7. Visualization Summary (Used in Dashboard)

✔ KPI Cards
✔ Donut Chart – Subscription Status
✔ Bar Charts – Revenue & Sales by Category
✔ Horizontal Bar Charts – Revenue & Sales by Age Group
✔ Pie Chart – Payment Method Distribution
✔ Histogram – Purchase Amount Distribution
✔ Bar Chart – Average Spend by Gender

8. Dashboard KPIs to Include

KPI	Description
Total Customers	Overall customer base
Average Purchase Value	Customer spend behavior
Average Rating	Customer satisfaction
Subscription %	Engagement level
Top Category	Revenue leader
Highest Revenue Age Group	Target segment

9. Business Recommendations

1. 🎯 **Increase Subscription Conversion**

   ○ Offer exclusive discounts to high-spending non-subscribers

2. 👕 **Focus on High-Revenue Categories**

   ○ Prioritize Clothing & Accessories marketing

3. 👥 **Target Middle-Aged Customers**

   ○ Personalized campaigns for ages 35–55

4. 🚚 **Optimize Shipping Offers**

   ○ Incentivize premium shipping for loyal customers

5. ⭐ **Improve Customer Ratings**

   ○ Follow-ups after low ratings to improve satisfaction

10. Conclusion

The analysis reveals a stable customer base with strong repeat purchasing behavior and clear revenue drivers. By leveraging targeted segmentation, subscription strategies, and category optimization, the business can significantly improve revenue and customer retention.