REPORT

The dataset consisted of **3,900 customer transaction records**, containing demographic information, purchasing behavior, subscription status, product categories, and review ratings.

1) Revenue Distribution by Gender

- **Male Revenue:** 157,890
- **Female Revenue:** 75,191
  - ★ **Insight**
    - A. Male customers contributed approximately **67.7%** of total revenue.
    - B. Female customers contributed approximately **32.3%** of total revenue.

This indicates that male customers generated more than double the revenue compared to female customers, suggesting stronger purchasing frequency or higher-value purchases among male segments.

2) Customers Using Discounts but Spending Above Average

Several customers who applied discounts still spent above the overall average purchase amount.

★ **Insight**

This suggests that:

- Discounts do not necessarily reduce revenue.
- Promotional strategies may encourage higher spending behavior.
- Discount campaigns can be used strategically to increase basket size.

3) Top Products by Average Review Rating

Top 5 highest-rated products:

PRODUCT	AVERAGE RATING
Sandal	3.82
Boots	3.79
Gloves	3.78
Handbag	3.78
Hat	3.78

★ **Insight**
- Customer satisfaction across products is relatively consistent (~3.7–3.8 range).
- Footwear-related items show slightly higher satisfaction levels.

4) Shipping Type vs Purchase Amount

- **Express Shipping Avg Purchase:** 60.48
- **Standard Shipping Avg Purchase:** 58.46

★ **Insight**

Customers choosing express delivery spend slightly more on average, indicating that customers willing to pay for faster delivery may belong to higher-value segments.

5) Subscription Impact on Spending

SUBSCRIPTION	CUSTOMERS	AVG-SPEND	TOTAL REVENUE
YES	1053	59.49	62,645
NO	2847	59.87	170,436

★ **Key Observations**
- Only **27%** of customers are subscribed.
- **73%** are non-subscribers.

- Average spending is almost identical between groups.
- ★ **Insight**

Subscription programs are not significantly increasing spending per customer, but non-subscribers dominate revenue due to larger population size.

This indicates potential to improve subscription benefits or marketing.

6) Products with Highest Discount Usage

Top discounted products:

PRODUCT	DISCOUNT RATE
Hat	50%
Sneaker	49%
Coat	49%
Sweater	48%
Pants	47%

★ **Insight**

Clothing and apparel items show the highest discount dependency, indicating competitive pricing pressure or promotional strategies in those categories.

7) Overall Business Interpretation

From the analysis:

- Male customers contribute most of the revenue
- Express shipping customers spend slightly more
- Discounts encourage purchases without reducing value significantly
- Subscription program impact is currently limited
- Product ratings are stable across categories
- Apparel items rely heavily on promotional discounts

8) Customer Segmentation

Customers were segmented based on their previous purchase behavior into New, Returning, and Loyal categories.

SEGMENT	NO.OF CUSTOMERS	PERCENTAGE
Loyal	3116	79.9%
Returning	701	18%
New	83	2.1%

★ **Key Insights**

1. A significant majority of customers (**~80%**) are loyal customers.
2. Only **2.1%** represent new customers, indicating low customer acquisition compared to retention.
3. The business demonstrates strong customer retention but may need improved strategies to attract new customers.
4. This suggests a mature customer base with repeat purchasing behavior.

9) Top Purchased Products by Category

★ **Insights**

1. Both accessories and clothing categories show strong demand consistency.
2. Clothing essentials (pants, shirts, blouses) indicate regular purchase behavior.
3. Accessories such as jewelry and sunglasses contribute significantly to order volume.
4. These products represent high-demand inventory items and should be prioritized in marketing and stock planning.

10) Revenue Contribution by Age Group

AGE GROUP	REVENUE
Young Adult	62,143
Middle Aged	**59197**
Adult	**55978**
Senior	**55763**

- ★ **Key Observations**
  1. **Young adults contribute the highest revenue**, indicating strong purchasing power in this segment.
  2. Revenue distribution across age groups is relatively balanced.
  3. Senior customers contribute nearly equal revenue compared to adults.
- ★ **Business Insight**
  Marketing campaigns targeted at young adults may generate higher returns, but other age groups also represent stable revenue sources.

11) Overall Behavioral Interpretation

Combining all analyses:

- Business has a strong loyal customer base
- Revenue is male dominated but age distribution is balanced
- Young adults are the highest revenue contributors
- Clothing and accessories are core revenue-driving categories
- Subscription program impact is limited
- Discounts influence apparel purchases heavily

Strategic Recommendations

1. Increase **new customer acquisition campaigns** (currently only 2.1%).
2. Strengthen **loyalty programs** since loyal customers form the majority.
3. Focus on marketing on **young adult demographics** for higher ROI.
4. Promote **top-selling products** like jewelry, pants, and shirts.
5. Optimize **subscription benefits** to increase adoption.
6. Continue targeted discounts in clothing categories to drive volume.