Final Summary and Recommendations

Key Insights

- Majority of customers are male (around 68%), with most purchases coming from the 30–60 age range.
- Clothing is the most purchased category, especially items like blouses and shirts.
- Montana is the top location by transaction count.
- Medium size and colors like olive, navy blue, and red are most preferred.
- The majority of users are not subscribed, yet those who are subscribed show slightly higher average purchases.
- Customers who used promo codes or discounts did not necessarily spend more, indicating potential to target better incentives.

Recommendations

- Focus campaigns on ages 35–60, especially in top-performing states like Montana.
- Promote clothing and accessories with targeted bundles based on size and color preferences.
- Expand subscription perks, as more engagement is seen in subscribed users.
- Reassess the impact of discounts and promo codes; consider implementing loyalty programs instead.

Suggested Additional Analyses

- Correlation Heatmap
 To show how strongly numeric fields (like age, purchase amount, rating, previous purchases) are related. This helps uncover subtle patterns and enhances professionalism.
- 2. Bar Chart of Top Items Purchased per Gender
 To compare preferences across genders, revealing product-targeting opportunities.

What You Achieved

- Cleaned and understood customer purchase data.
- Visualized key behaviors such as age, gender, location, seasonality, and preferences.
- Gained strategic insights into what, how, and when people buy.
- Built a foundation for further predictive analytics like customer segmentation or churn prediction.

This project demonstrates strong foundational skills in exploratory data analysis and can be extended into machine learning or dashboarding for real-world applications.