## **Exploratory Data Analysis Report**

## **Business Insights**

- 1. **High Revenue Products:** Products in categories like "Electronics" and "Books" tend to have higher prices (e.g., ActiveWear Smartwatch and BookWorld Biography). Promoting these products in high-demand regions could maximize revenue.
- 2. **Regional Preference Trends:** Customers in "South America " and "Europe " form a significant part of the dataset. Tailoring region-specific promotions and campaigns for these areas can enhance customer engagement and sales.
- 3. **Signup Trends:** Many customers signed up in 2024. The company can analyze the promotional strategies from that year to replicate similar campaigns for customer acquisition in the future.
- 4. **Frequent Product Purchases:** Certain products like "ActiveWear Smartwatch" have been purchased multiple times by various customers. Creating bundles or offering discounts on such popular products can further boost sales.
- 5. **Top Performing Customer Segments:** Customers with high transaction values or large purchase quantities can be targeted for loyalty programs or exclusive offers to retain them and encourage repeat purchases.

## Conclusion

The EDA revealed critical insights into regional performance, customer spending habits, and product popularity. These findings can guide future marketing and inventory strategies to maximize revenue.