

EDA ANALYSIS

Business Insights:

1. Customer Demographics: Increase regional-specific marketing efforts to target high-density areas, such as personalized promotions for South America.
2. Signup Patterns: Proactive measures can be taken such as referral programs or first-time purchase discounts, should be employed to encourage sign-ups, especially during year-end
3. Sales Insights: On average, customers purchase 2.54 items per transaction, so by making an MBA (Market Basket Analysis) analysis, combo offers can be given to customers based on the products they frequently purchase together. This would encourage customers to buy more items per transaction, increasing the average order value and overall sales performance.
4. Product Popularity: The most frequently purchased is the ActiveWear Smartwatch, based on this, marketing campaigns should promote the ActiveWear Smartwatch and other high-demand products such as tech-related and books (since that is also purchased frequently).
5. Sales Trends: The most frequent transaction dates are towards June and September. This indicates seasonal trends, with a spike in revenue in the mid-year months. This helps with efficient inventory planning and promotional activities for peak seasons.