eCommerce Transactions Analysis Report

I have performed Exploratory Data Analysis (EDA) on the eCommerce transactions datasets. They have provided valuable insights into customer behavior, product performance and regional sales trends.

Below are the key business insights derived from the analysis:

1. Seasonal Sales Peaks

Sales increase significantly during Q3 (July - September), highlighting a need for promotional campaigns and inventory planning during these months.

- 2024 Q3 has a total sales value of \$205406.88.

2. South America as the leading region

 South America contributes the highest revenue, with an average order value (AOV) of \$721.55.

Strengthening marketing and logistics in South America can further boost growth.

While **North America** has the least average order value (AOV) **of \$624.23** indicating there is a need for more business development in that region with more marketing strategies.

3. Dormant Customer Segment

59.80% of customers have been inactive for over **75** days. Re-engagement strategies, such as personalized discounts or email campaigns, could help retain these customers.

4. Category Performance

Certain categories, such as **Books**, dominate sales, while others lag (like **Home Decor**). This suggests the need to expand inventory or promotions in high-performing categories and reassess the profitability of low-performing ones.

5. Product Demand vs. Profitability

High-demand products like (ActiveWear Smartwatch, SoundWave Headphones) drive volume but not revenue. Pairing these with high-margin items can optimize profitability.