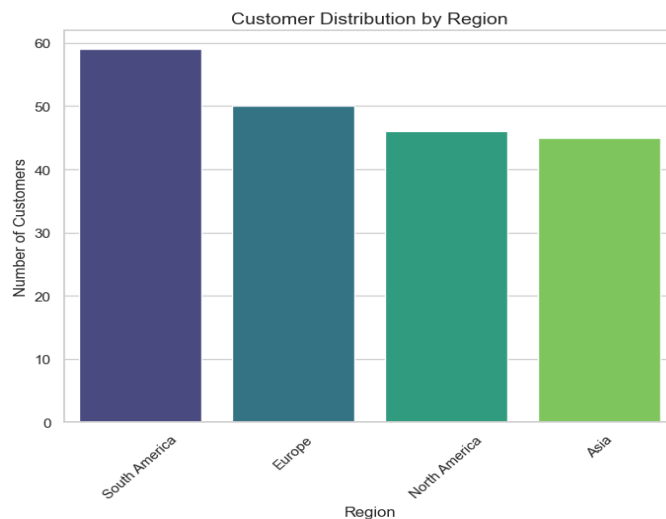# EDA Report eCommerce for Transactions Dataset
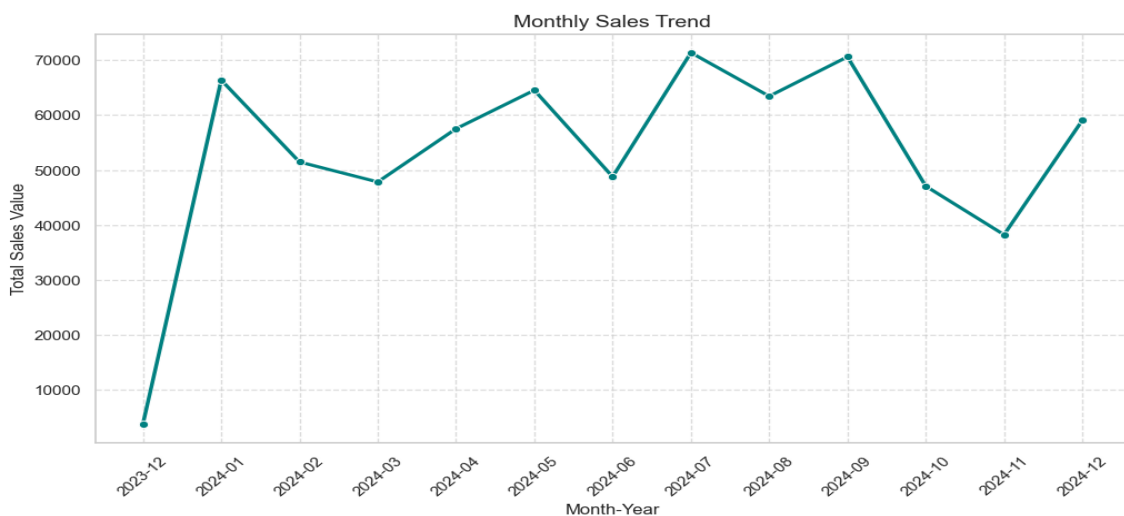
1. Customer Distribution by Region

- **Plot Type**: Enhanced Bar Plot

- **Insight**: The distribution of clients throughout various regions is displayed in this plot. Key geographic markets are identified by visually highlighting the areas with the largest client bases.
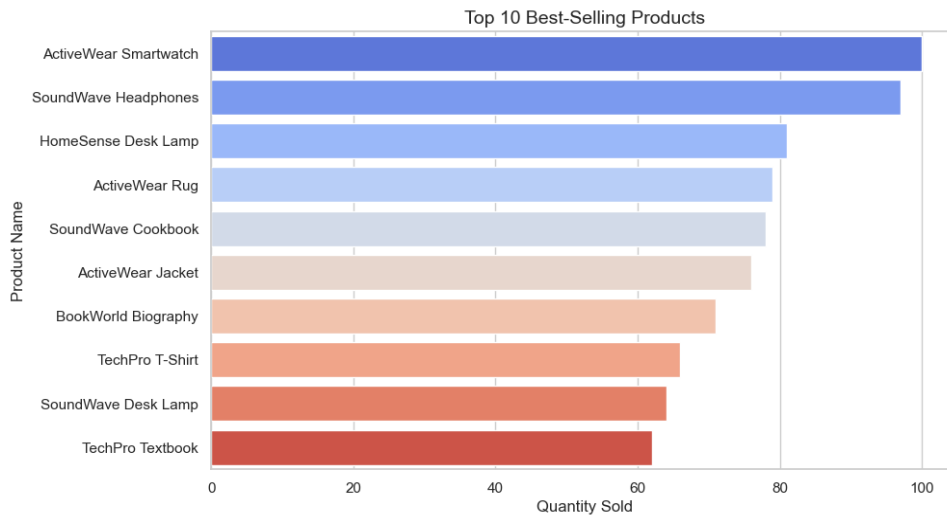

2. Top 10 Best-Selling Products

- **Plot Type**: Enhanced Bar Plot

- **Insight**: The top 10 best-selling items are displayed in this bar plot according to the total number of sales. It identifies the most popular products, offering useful data for marketing and inventory control.

3. Monthly Sales Trend

- **Plot Type**: Line Plot with Markers

- **Insight**: A line plot is used to show the sales trend over time. By tracking this pattern, one can spot times when sales are at their highest, which may be connected to seasonal specials or other elements affecting purchasing patterns.
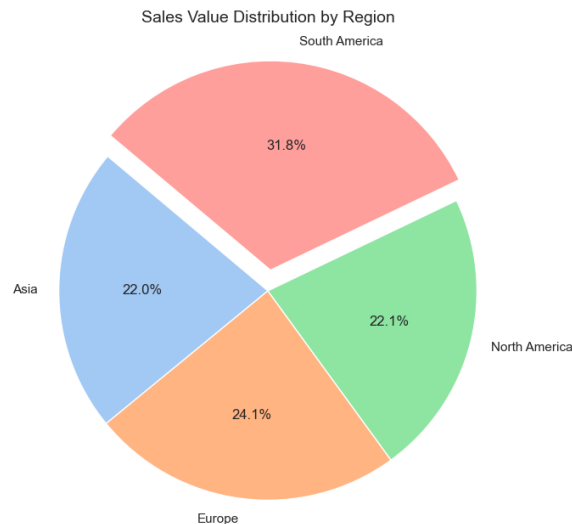

Top 10 Best-Selling Products

4. Average Price by Product Category

- **Plot Type**: Strip Plot

- **Insight**: A clear picture of the price distribution across different product categories is given by the strip plot. It makes it easier to comprehend the pricing approach used within each category by highlighting the ones with higher average prices.

Average Price by Product Category

5. Sales Value by Region

- **Plot Type**: Pie Chart with Explode

- **Insight**: The distribution of total sales value among areas is shown in this pie chart, with the region that contributes the highest sales highlighted with an explosion effect. This information is helpful for identifying high-performing areas and concentrating resources there.

Sales Value Distribution by Region

6. Correlation Heatmap of Numerical Features

- **Plot Type**: Heatmap

- **Insight**: Correlations between important numerical parameters, including quantity, price, and total sales value, are displayed in the heatmap. As would be predicted from usual sales habits, a substantial connection between quantity and total sales value indicates that the more things sold, the greater the overall sales value.

Correlation Heatmap of Numerical Features