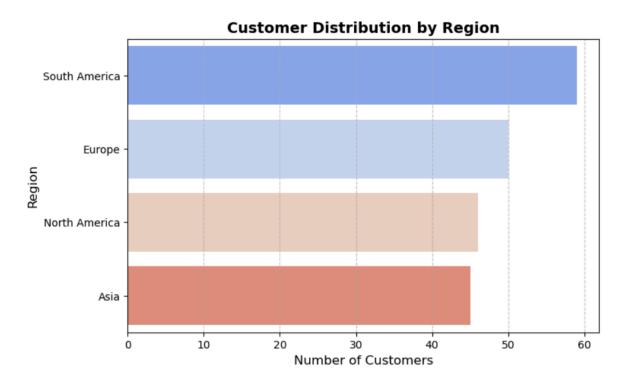
# **E-Commerce Data Analysis Report - EDA**

## Prepared by: Akshayaa S

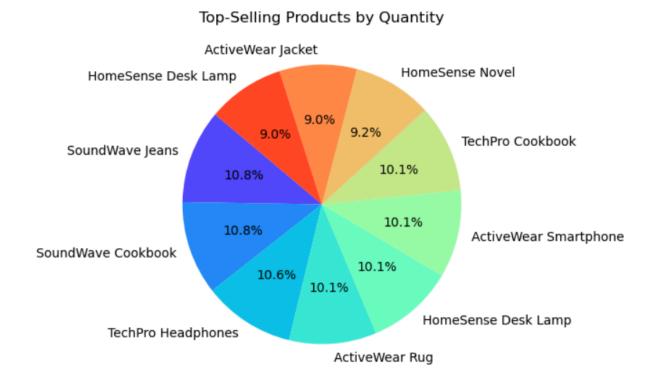
To understand the key trends and business insights, Exploratory Data Analysis (EDA) is done and listed below.

## 1. Customer Distribution by Region:



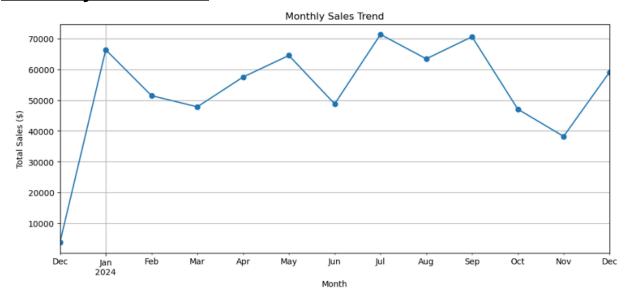
From the above chart we can see that the majority of customers are from South America and Europe, So by making these regions as key target markets will get more profit and will implement some region-specific marketing campaigns to enhance customer engagement.

## 2. Top-Selling Products by Quantity and Popular Categories:



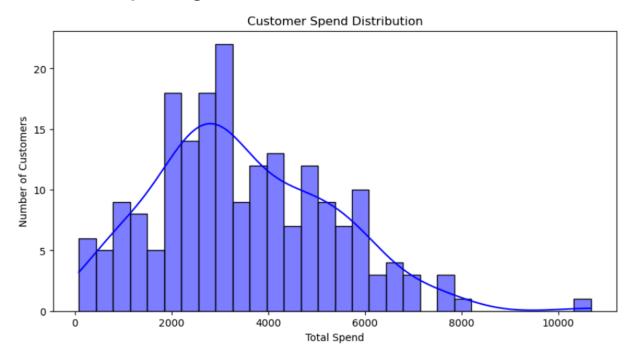
From the above pie chart we can see that the highest selling products belong to Clothing, Books and Electronics Categories. For more profit we have to increase the inventory for these high-demand categories and have to introduce more promotions and offers.

#### 3. Monthly Sales Trend:



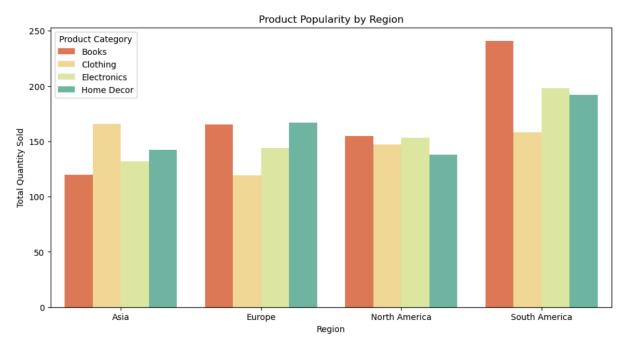
From the above graph we can see that the Sales fluctuate significantly across different months. This indicates the seasonal demand. To maximize the revenue we have to optimize the stock levels and introduce discounts during the peak periods.

#### 4. Customer Spending Behavior:



From the above plot we can see that the majority of customers spend between 400 - 4000 on their purchases. If we introduce discounts and loyalty programs for repeating buyers in this price range we can maximize the Loyal Customers Count.

#### 5. Product Popularity by Region:



From the above plot we can see that certain categories like Books, Home Decor and Electronics in South America perform better in specific regions. We can further boost the Sales by Region-based pricing and promotions.