

EDA report

The "Customers" dataset has 200 unique customers, while the "Transactions" dataset lists 199 unique CustomerID suggesting one or more customer may not have made any transactions.

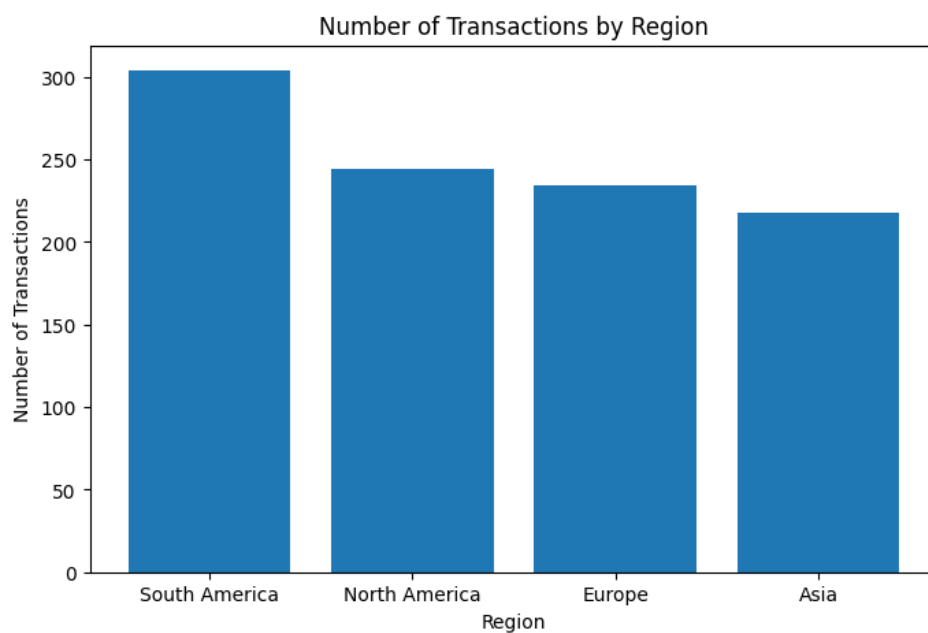
There are total 100 unique products in all 4 category with price range from \$16.08 to \$497.78

1000 transactions in a single year with each having unique IDs.

average quantity sold per transaction is close to 2.54 with the maximum quantity of 4.

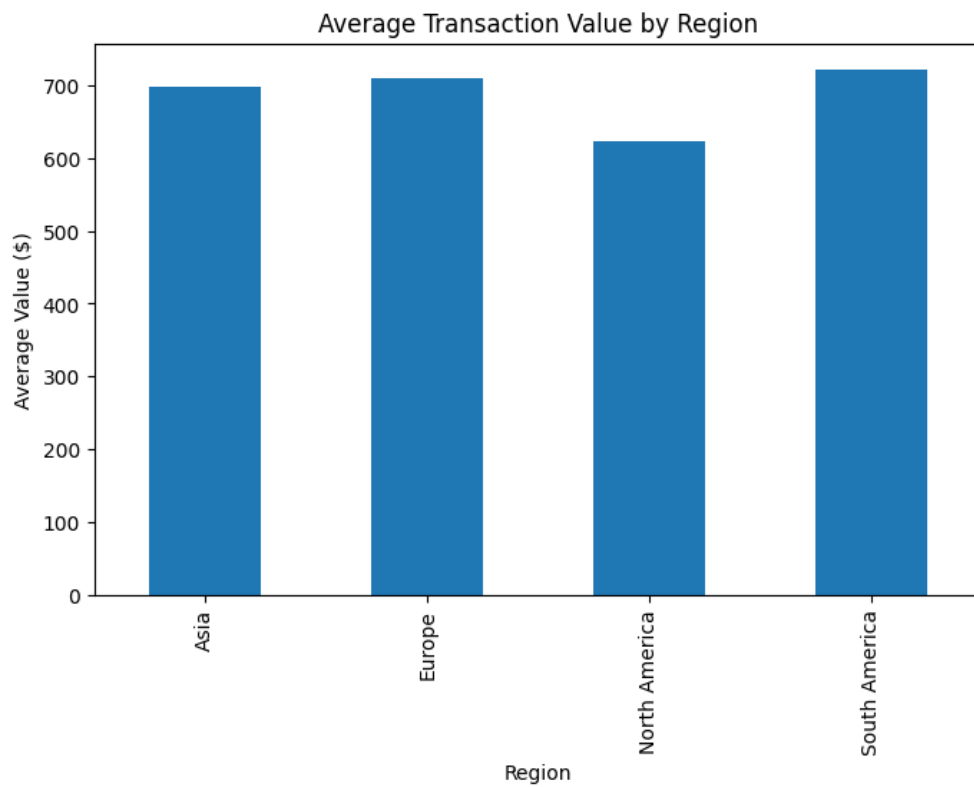
"TotalValue" matches Price * Quantity confirming accurate data entry.

Transactions by Region:



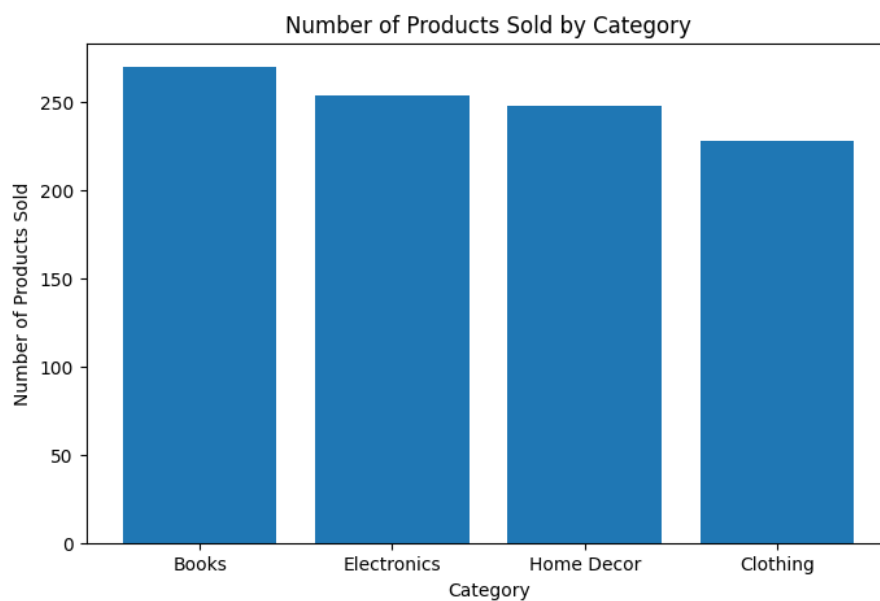
South America has the highest no of transition among all the regions indicating a larger customer base or higher buying frequency.

Regional Spending Patterns:



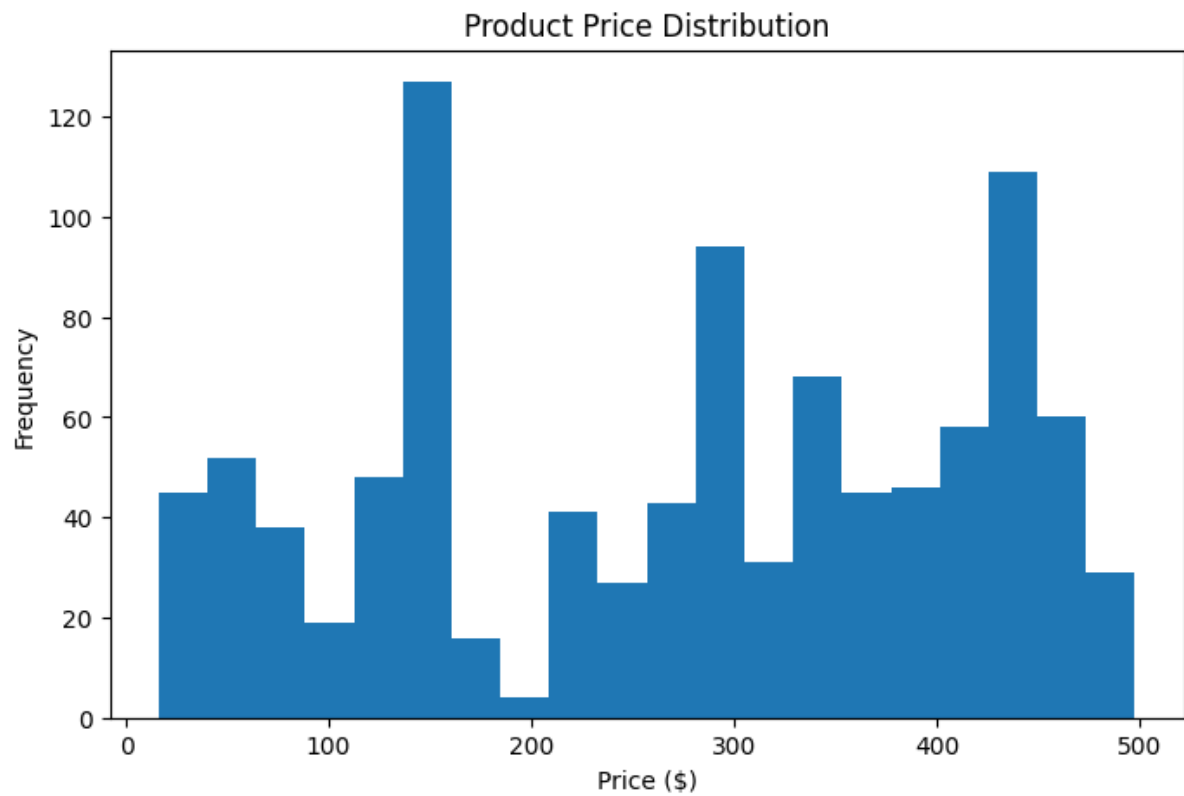
Customers in **Europe** have the highest average transaction value so we can target this segment for high price product.

Product Category Popularity:



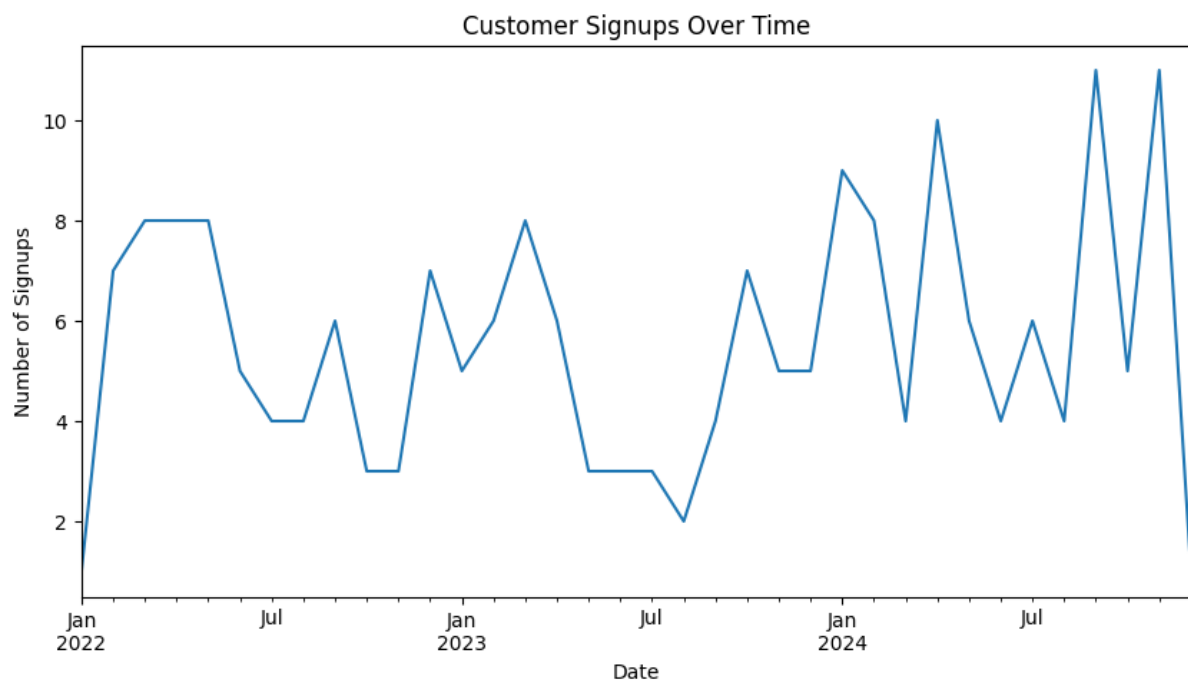
Books are most bought category which could be the reason for strong demand of books.

Product Pricing Insights:



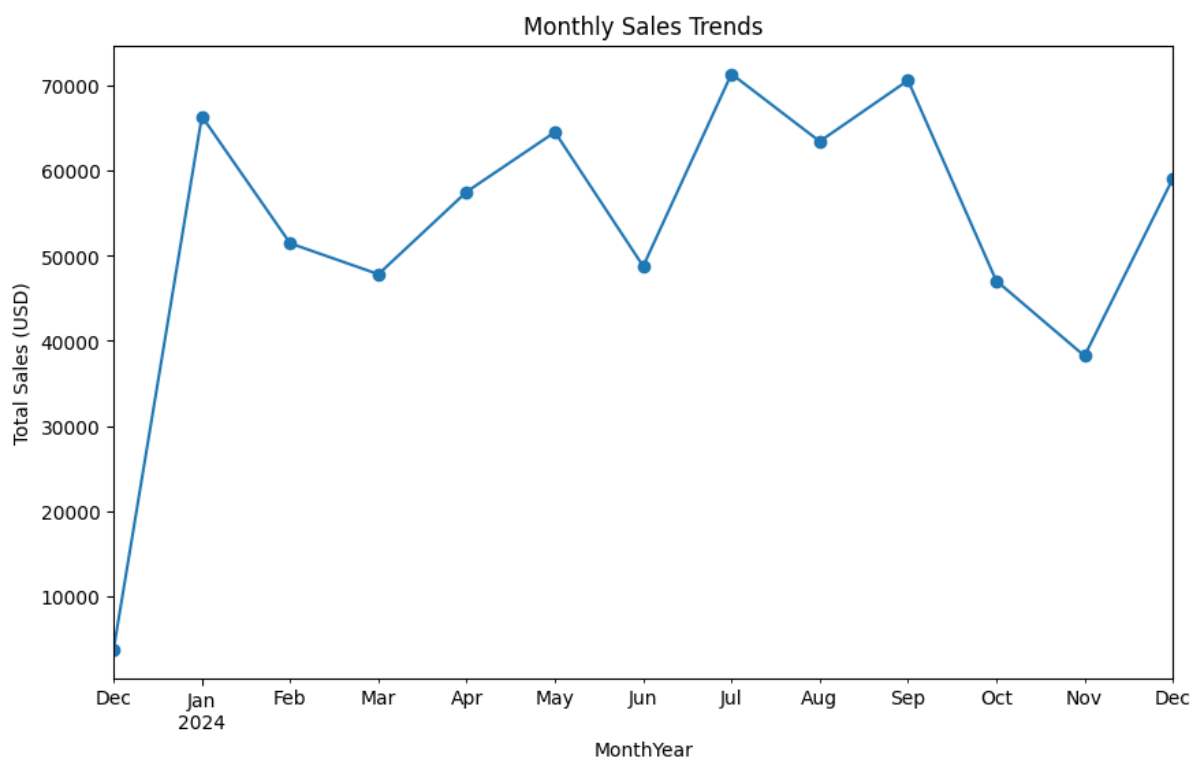
Major products lie between \$150 to \$450 range, this could be used for optimal pricing.

Customer Acquisition Trends:



Customer signup data shows that there has been consistent gain in customers each month, excluding the year 1st half of 2023, after 2023 there has been increase in user signups.

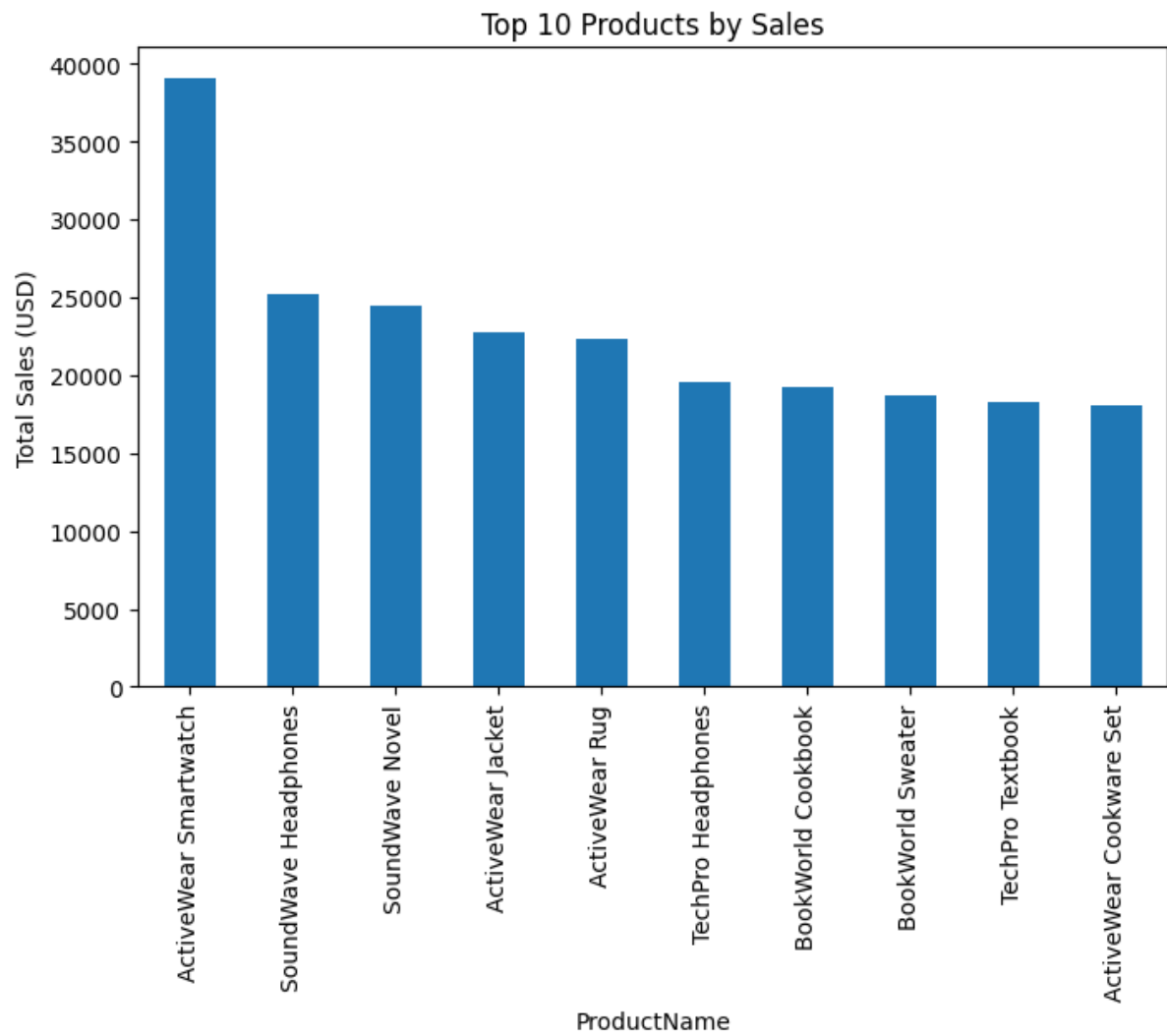
Monthly Sales Trends:



December and September see significant spikes in sales, likely driven by seasonal promotions and holidays.

A drop occurs in November, suggesting potential for targeted campaigns to sustain revenue during this period.

Top-Selling Products:



"ActiveWear Smartwatch" sells the most generating the revenue (\$39,096.97)