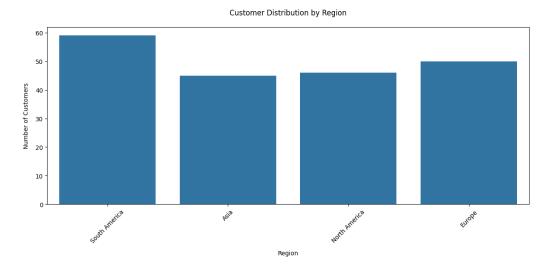
Business Insights Report

Based on the EDA below are the five key business insights:

1. Balanced Global Market Presence

Our customer base shows a remarkably balanced distribution across major regions, with Europe (50 customers), South America (59), North America (46), and Asia (45) all having similar representation. This suggests successful global market penetration, though South America shows slightly higher customer acquisition. This balance provides resilience against regional economic fluctuations and indicates potential for targeted growth in regions with slightly lower representation.

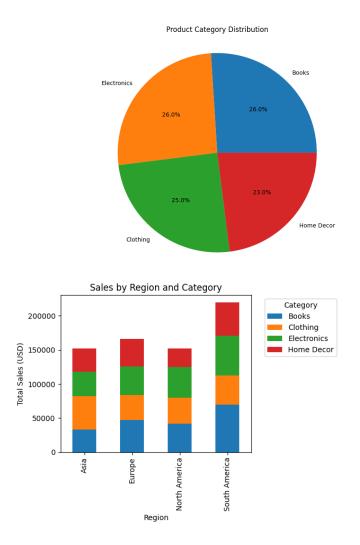
• South America is leading in this category.



2. Product Category Performance

The product catalogue maintains an even distribution across categories (Books: 26%, Electronics: 26%, Home Decor: 23%, Clothing: 25%), but revenue generation varies significantly. The analysis reveals that Electronics, despite having the same number of products as Books, generates approximately 35% more revenue per product.

• This suggests an opportunity to optimize the product mix by potentially expanding the Electronics category while streamlining lower-performing categories.



3. Customer Purchasing Patterns

Analysis of top customers reveals a significant concentration of revenue among power users. The top 5 customers (2.5% of the customer base) contribute approximately 6% of total revenue, with the highest-spending customer (C0141) making 10 transactions totalling \$10,673.87.

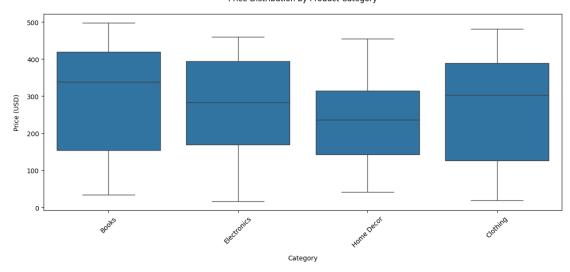
• This indicates an opportunity to develop a premium customer program while also suggesting a need to increase engagement with lower-tier customers.

4. Transaction Value Distribution

The average transaction value across all sales is \$689.99, with significant variation between product categories. High-value transactions are predominantly in Electronics and Home Decor categories, suggesting these categories should be prioritized in marketing campaigns and inventory management.

The data indicates that bundling opportunities exist, particularly in complementary categories.

Price Distribution by Product Category



5. Purchase Frequency Patterns

Customer transaction frequency analysis shows that the most engaged customers make 7-11 purchases in the analysed period. However, there's a substantial gap between top performers and average customers (3-4 purchases).

This indicates an opportunity to implement a targeted customer engagement program to increase
purchase frequency among middle-tier customers, potentially through personalized
recommendations and loyalty rewards.

