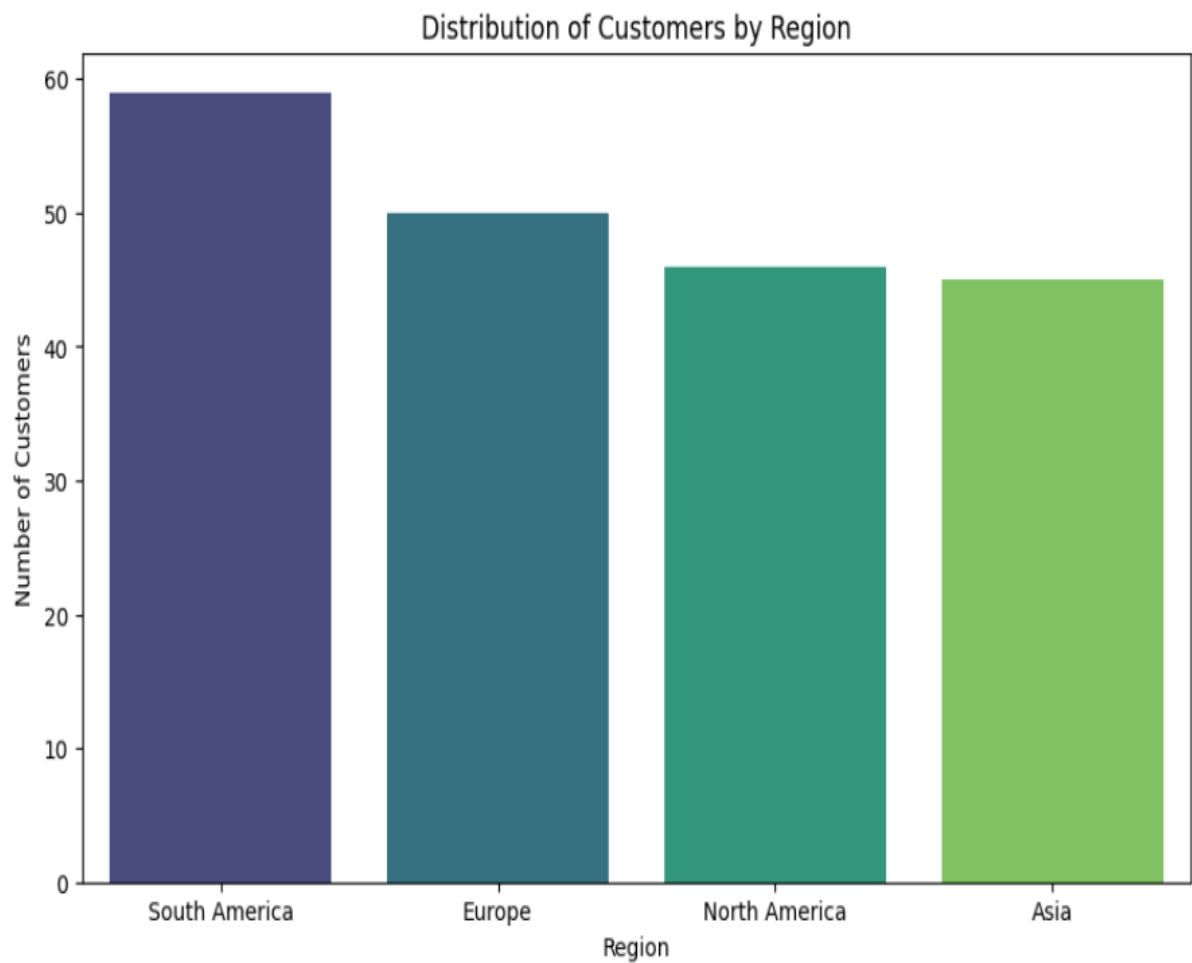


# Business Insights Report

The analysis of customer transaction data has provided valuable insights into different aspects of business performance. These insights can drive strategic decisions in marketing, sales, and product management. Below is a breakdown of the key findings from the data.

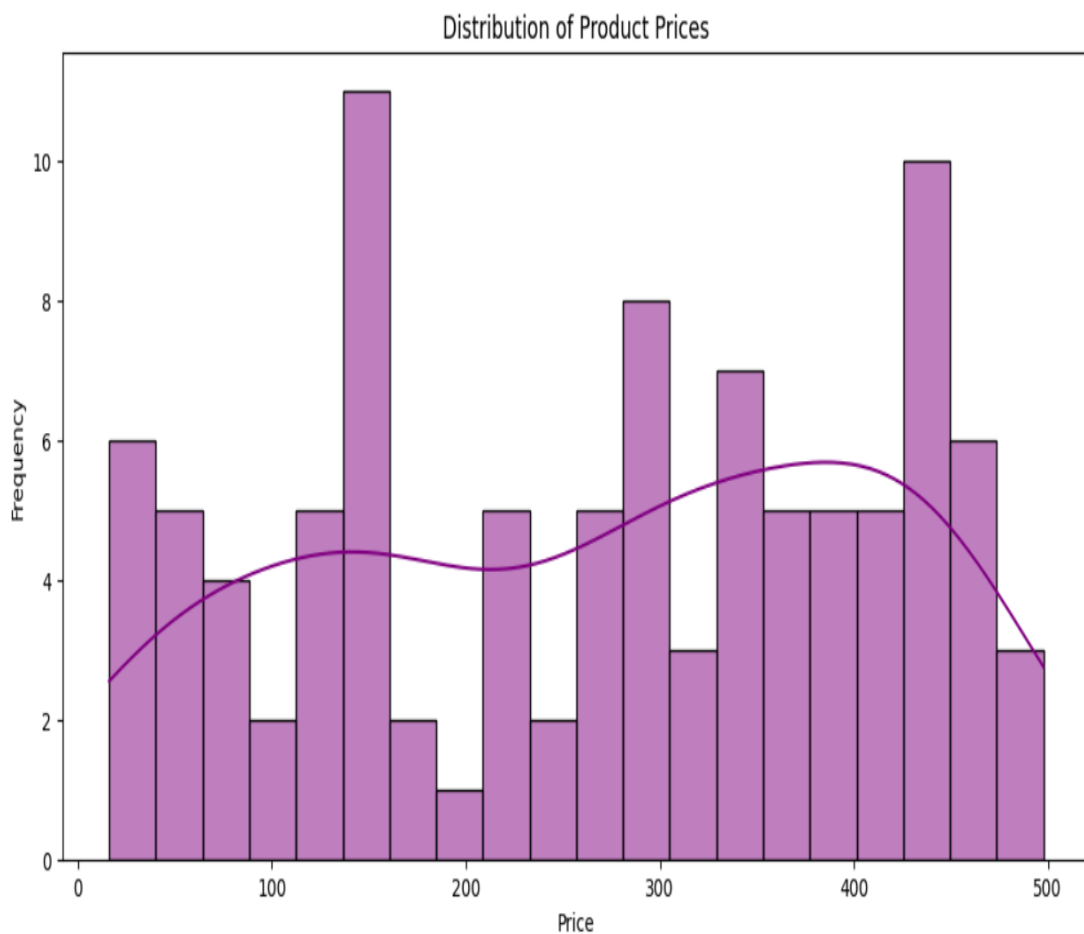
## 1) Distribution of Customers by Region

- **Geographical distribution** shows **South America** having the highest number of customers.
- **Followed by Europe, North America, and Asia** in terms of customer numbers.
- This distribution gives insights into where businesses should focus their marketing, operations, and customer service.



## 2) Product Pricing Patterns

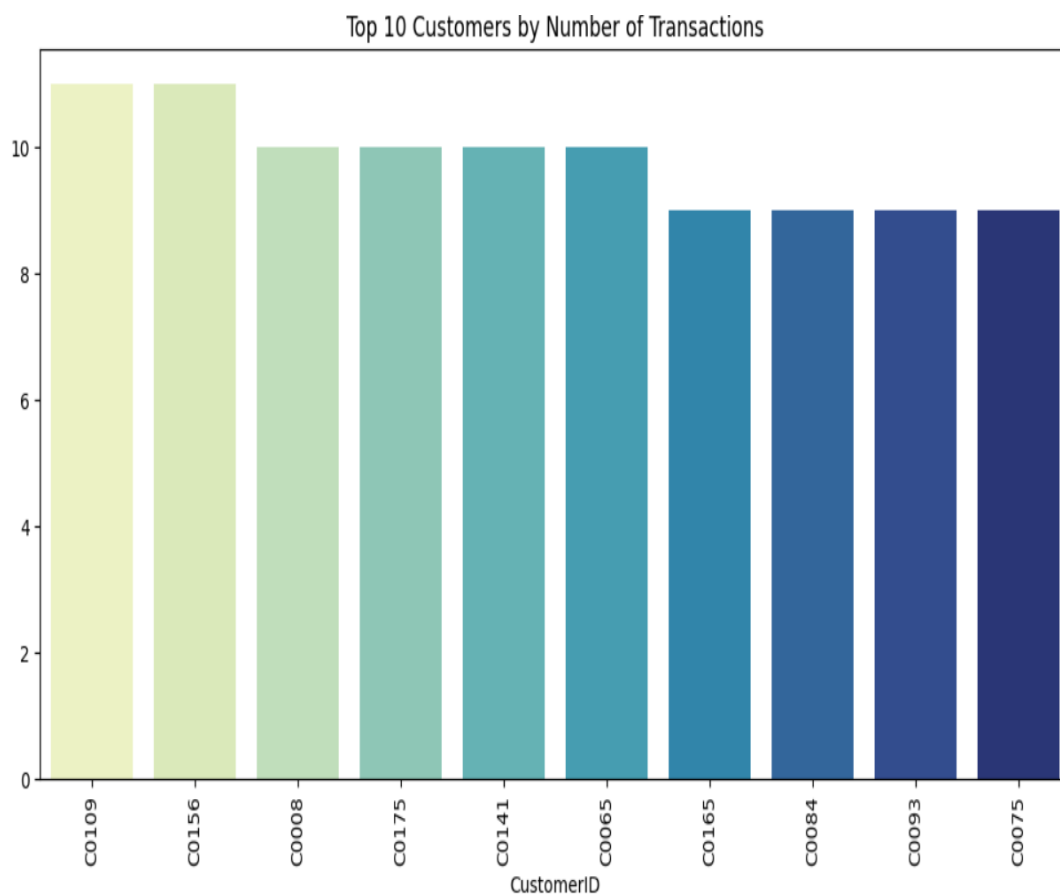
- **Pricing Strategy:** The highest frequency of products is priced between 100 and 200, indicating this range is the most preferred by customers. Businesses should prioritize stocking products within this price bracket to meet demand.
- **Customer Segmentation:** A secondary peak between 300 and 450 suggests a different customer group willing to pay more. Marketing efforts can target this segment with premium product offerings.
- **Product Positioning:** Position most products in the 100-200 range, while curating a premium selection in the 300-450 range to attract higher-spending customers.
- **Statistical Summary:** Average price: 267.55. Range: 16.08 to 497.76.



### 3) Transaction Volume and Customer Activity:

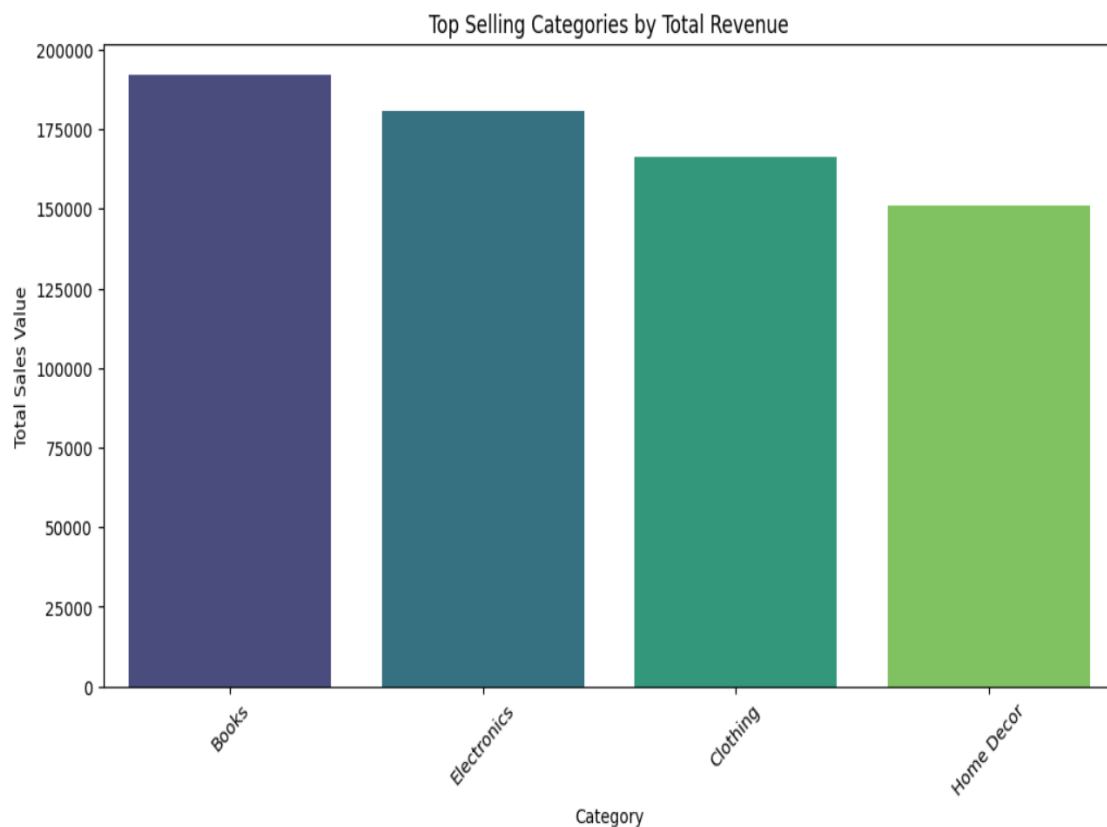
- The **average number of transactions per customer** is **5.03**, reflecting moderate customer activity.
- This suggests a **balanced level of engagement**, with some customers transacting more frequently.
- **Targeting high-volume customers:** Identifying high-transaction customers allows businesses to design loyalty programs or targeted marketing.

S.NO	CustomerID	Number of Transactions
1	C0109	11
2	C0156	11
3	C0008	10
4	C0175	10
5	C0141	10



#### 4) Top-Selling Products:

- **Top-Selling Categories:** The highest revenue-generating category is **Books**, followed by Electronics, Clothing, and Home.
- **Inventory Prioritization:** Focus on stocking more products from these top-selling categories to cater to customer demand and maximize sales.
- **Marketing Strategy:** Design focused marketing campaigns for Books and other popular categories to increase product visibility and customer engagement.
- **Promotions:** Offer attractive promotions, discounts, or bundles for these categories to incentivize purchases.
- **Revenue Growth:** Align inventory and marketing strategies with these top categories to optimize revenue and improve customer retention.



## 5) Seasonality of Purchases:

- The **top 5 months** in terms of total sales are **July, September, January, May, and August**.
- These months represent **peak sales periods**, which businesses should prepare for by adjusting inventory and running promotions.
- **Seasonal trends:** Understanding when customer spending peaks helps with planning marketing campaigns and stock management.

S.NO	Month	Sales
1	July	71366.39
2	September	70603.75
3	January	66376.39
4	May	64527.74
5	August	63436.74

