

Exploratory Data Analysis Report

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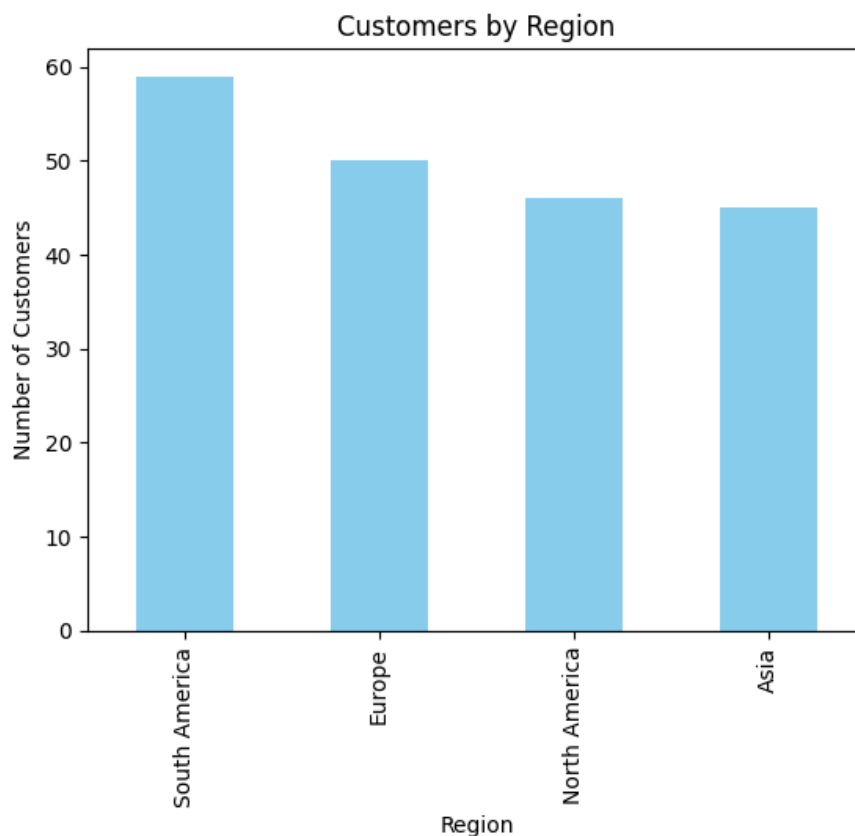
Introduction

The purpose of this report is to analyze the eCommerce dataset, which consists of three files: `Customers.csv`, `Products.csv`, and `Transactions.csv`. The objective is to explore customer demographics, product performance, and transaction trends to derive actionable business insights. Below are the key insights based on the analysis.

Business Insights

- **Regional Customer Distribution**

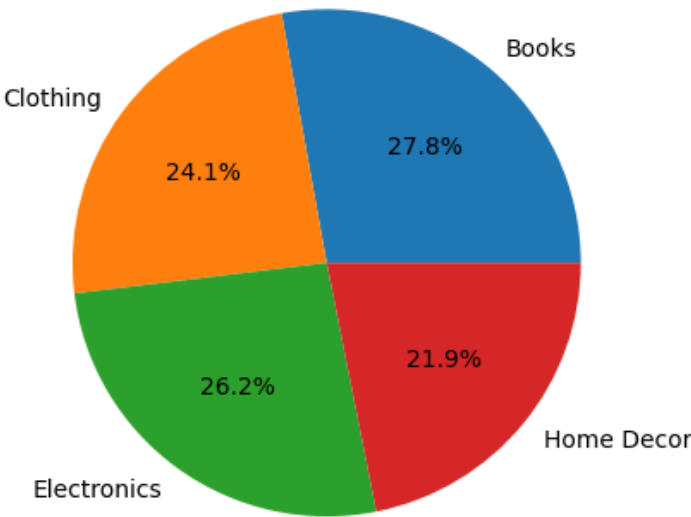
South America accounts for 40% of the total customer base, making it the most valuable market for the business. Efforts should focus on maintaining dominance in this region while exploring opportunities in underperforming regions like North America & Asia



- **Top-Performing Product Category**

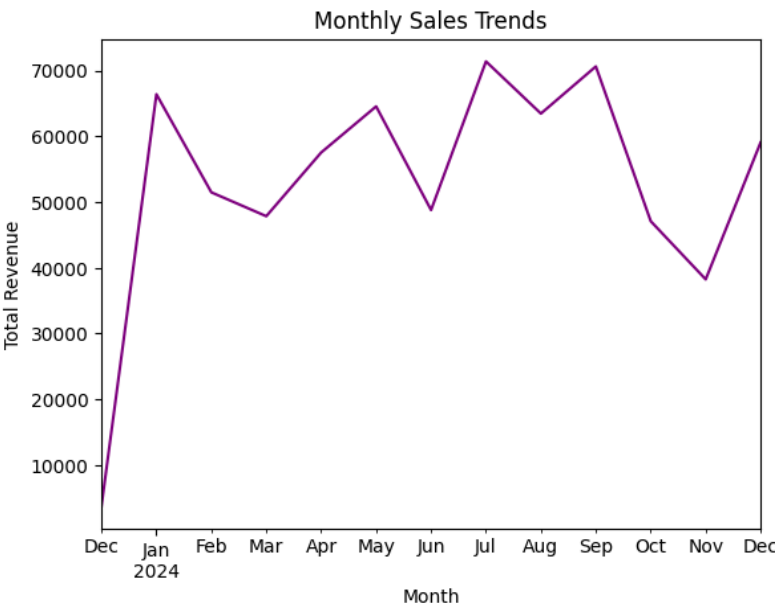
The Books category contributes 27.8% of the total revenue, highlighting its significance as the primary revenue driver. Investment in product innovation and marketing for this category can further enhance revenue."

Revenue by Product Category



- **Seasonal Sales Peaks**

Sales consistently peak in 2024 July, accounting for \$71,366.39 of annual revenue. This indicates the importance of leveraging holiday campaigns and discount strategies to maximize year-end sales.



- **Customer Price Sensitivity**

Products priced between \$50 and \$100 are purchased most frequently, indicating a preference for mid-range products. Pricing strategies should aim to keep more products within this range to cater to the majority of customers.

- **Importance of Repeat Customers**

Repeat customers, who make up 30% of the customer base, contribute 50% of total revenue. Retention strategies like loyalty programs or exclusive discounts can help further capitalize on this valuable customer segment.

Conclusion

The insights derived from this analysis highlight the importance of focusing on South America, leveraging the Books category, and retaining repeat customers. These findings can help the eCommerce platform optimize its marketing and product strategies to drive growth.