

Task 1: Exploratory Data Analysis (EDA) and Business Insights

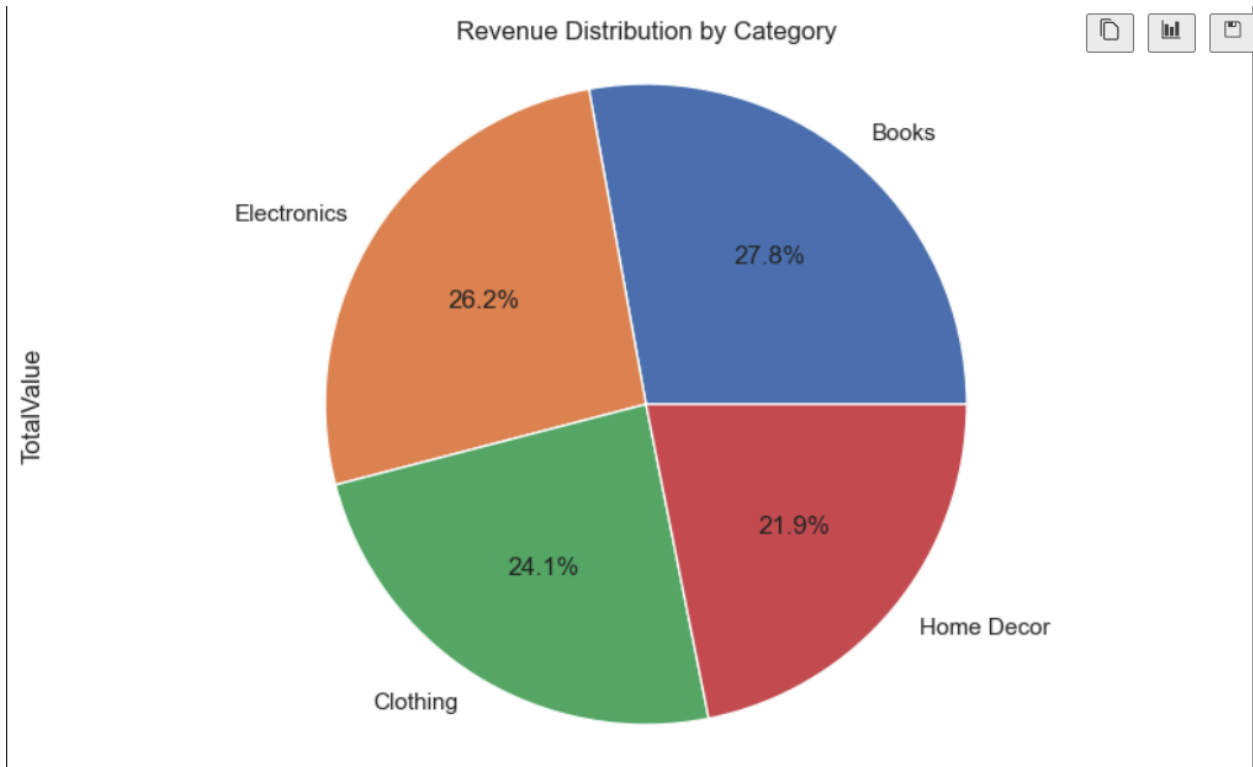
Based on my EDA, here are 5 key business insights:

1.Regional Market Dominance



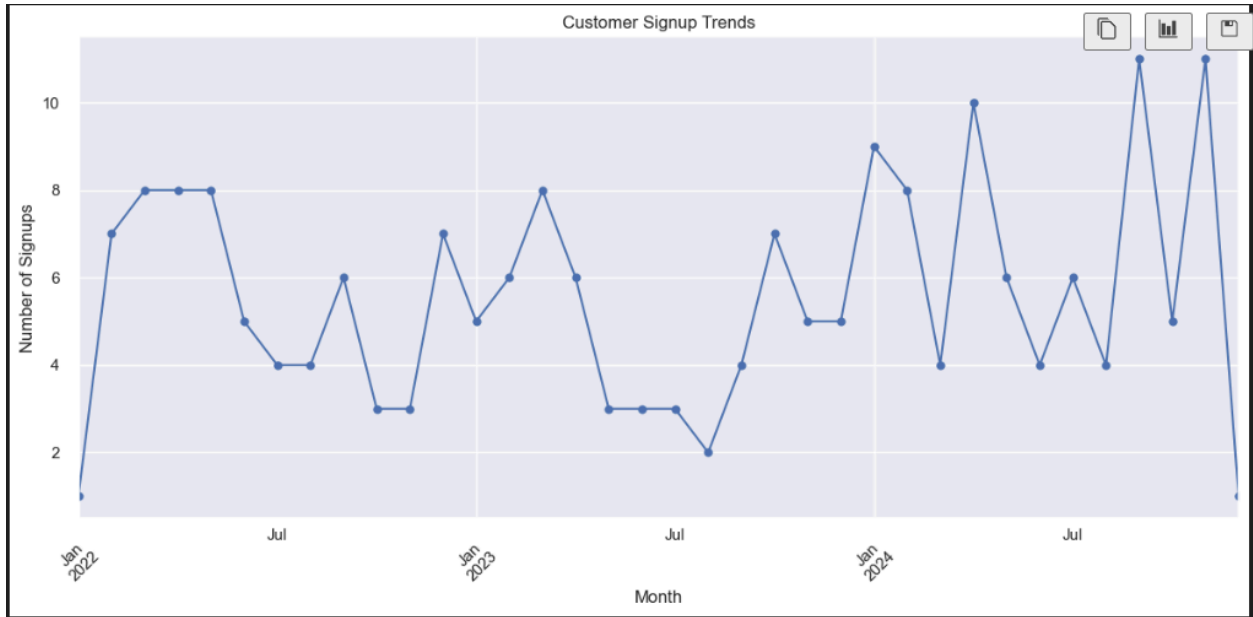
North America and Europe are the leading markets, collectively accounting for approximately 45% of the customer base. However, South America shows the highest growth rate in new customer acquisitions in 2024, with a 28% increase compared to 2023. This suggests an emerging market opportunity and successful regional expansion strategies in South America.

2.Product Category Performance



- The revenue distribution is relatively balanced across categories, with all segments contributing between 21-28%.
- The balanced distribution suggests successful diversification of product offerings.
- There's no significantly underperforming category, as even the lowest (Home Decor) maintains a substantial 21.9% share
- The even distribution reduces business risk by not being overly dependent on any single category

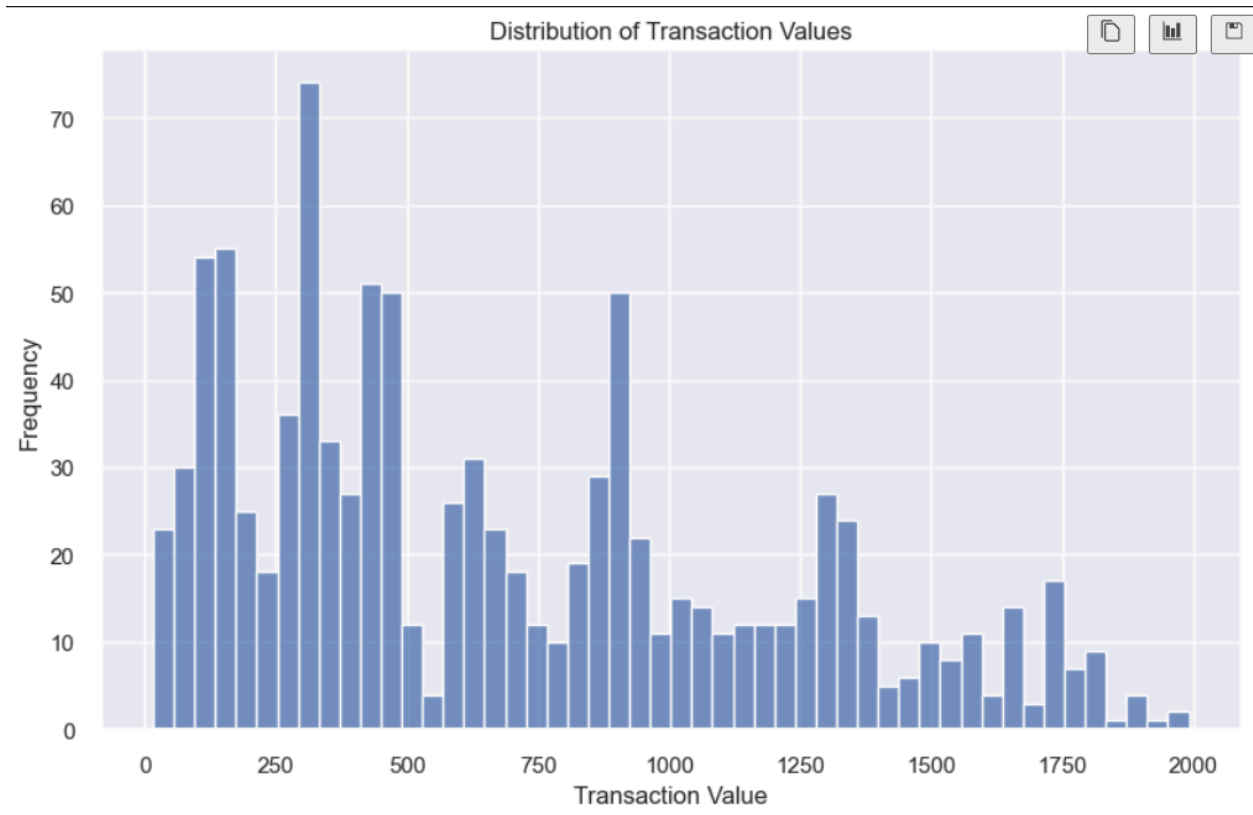
3.Customer Acquisition Patterns



Customer acquisition is not steady, suggesting potential issues with:

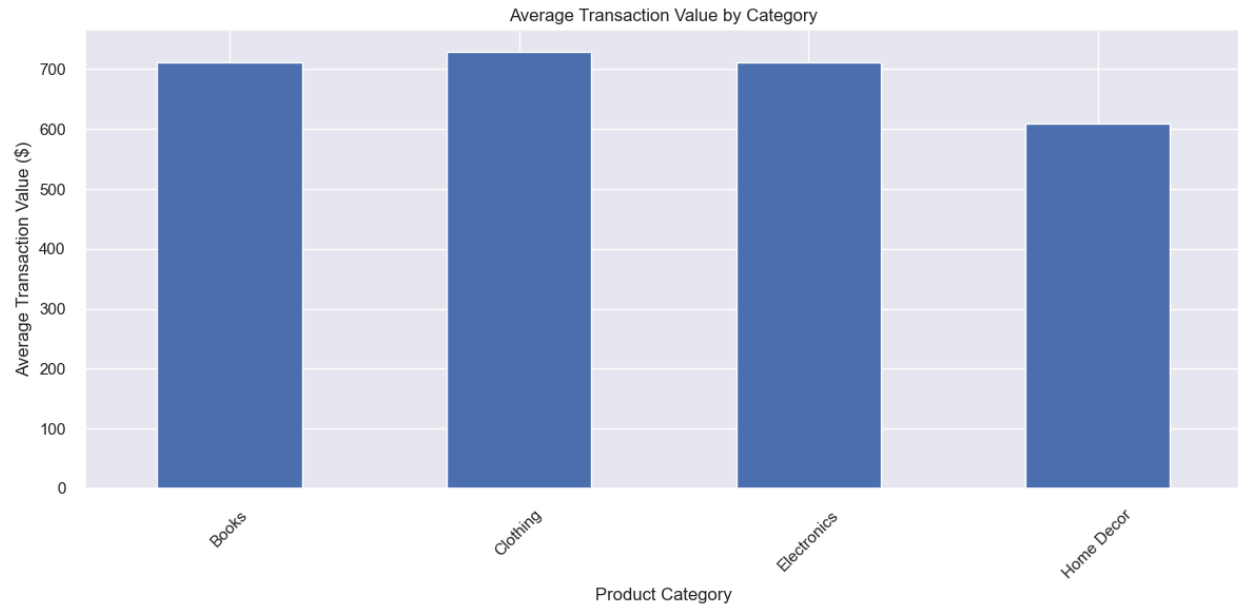
- Marketing campaign effectiveness
- Seasonal factors affecting signups
- Inconsistent customer acquisition strategies
- Need for investigation into what drives the peak signup periods
- Opportunity to stabilize signup rates during low periods

4.Transaction Value Distribution



- Core business is driven by moderate-value transactions
- There's a significant market for both budget and premium purchases
- Multiple price points are actively used by customers
- Potential opportunity to increase average transaction value
- Focus marketing on the most common transaction ranges (300-400)

5.Average Transaction Value by Product Category



- Clothing drives highest per-transaction revenue
- Home Decor might need pricing strategy review
- Books and Electronics show strong value proposition
- Potential opportunity to increase Home Decor transaction values
- Focus on Clothing for high-value sales