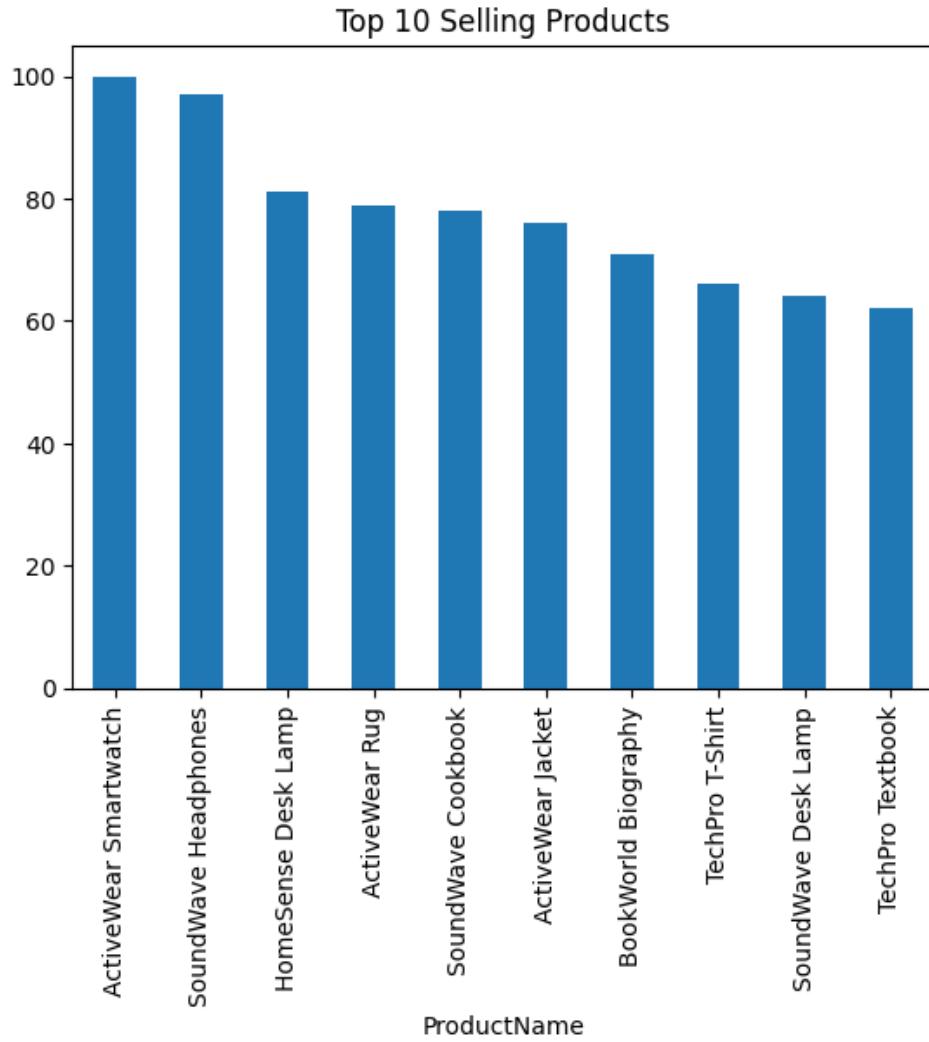


# EDA Report: eCommerce Transactions Dataset

By: Abhishek Kumar

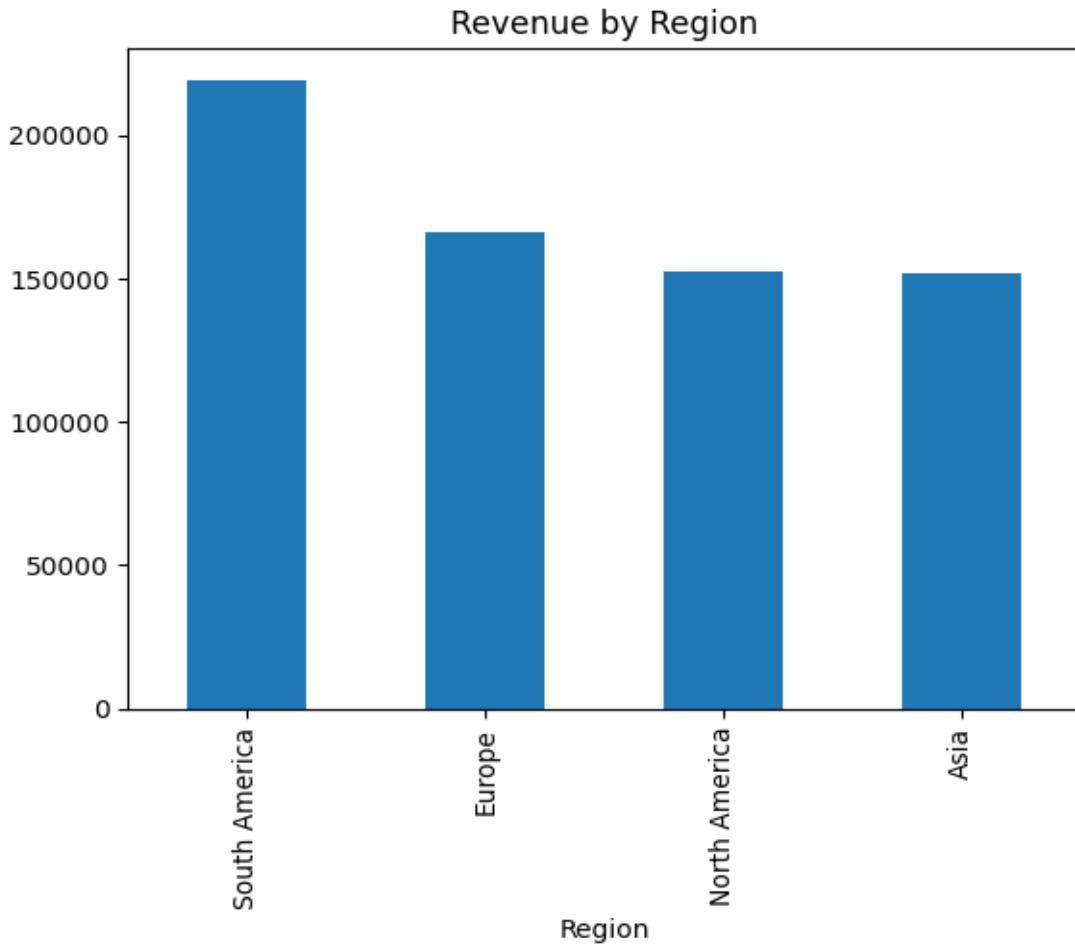
## 1. Top-Selling Products



The Active Wear Smartwatch and Sound Wave Headphones are the clear sales leaders, each selling approximately 95-100 units. There's a noticeable gap between these top two products and the rest, with the third-place Home Series Desk Lamp selling around 80 units. This suggests these wearable tech products have strong market demand.

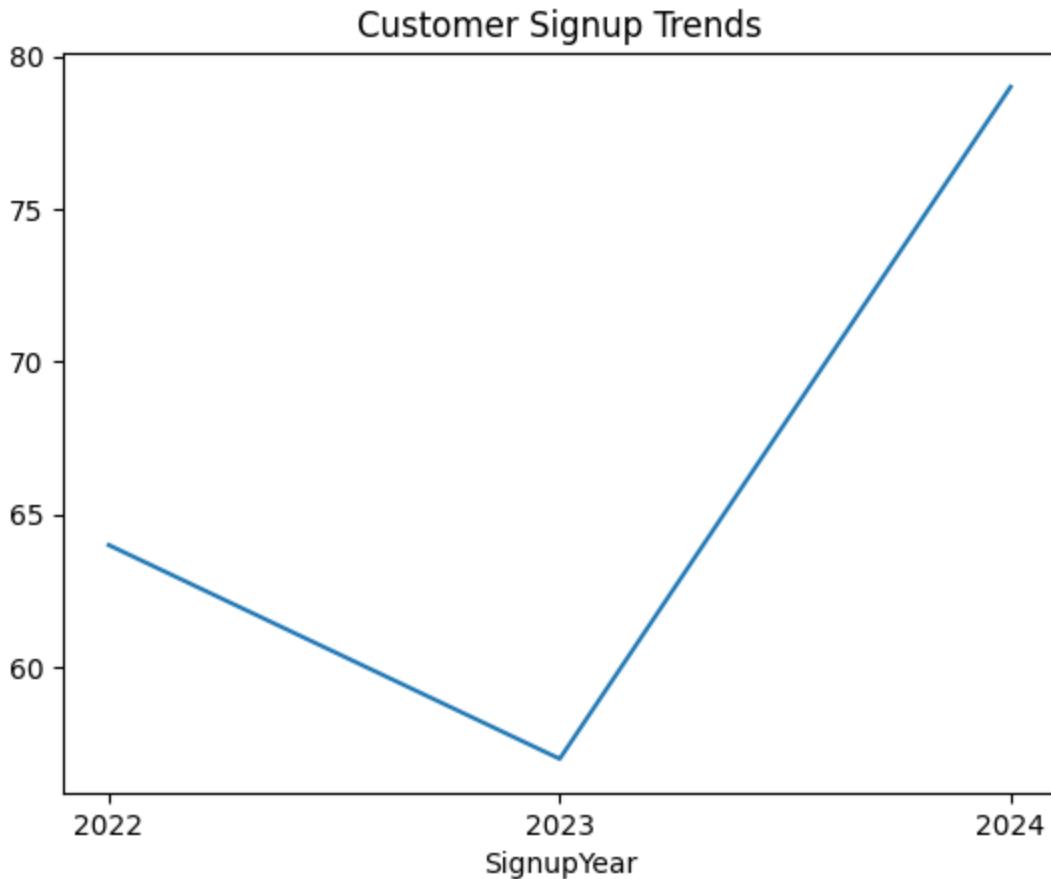
Recommendation: Consider developing product bundles that pair the top-selling smartwatch and headphones together, potentially with a bundle discount. This could drive even higher sales of these popular items while encouraging larger transaction values.

## 2. Revenue Contribution by Region



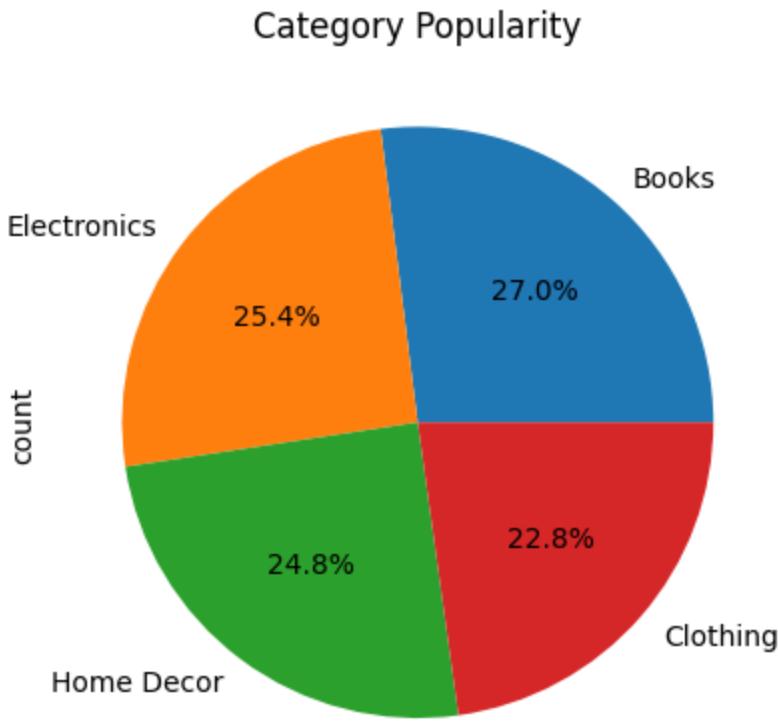
The revenue breakdown shows South America as the dominant market, generating around \$210,000 in revenue. This represents significantly higher performance compared to other regions. Europe holds the second position with approximately \$160,000, while North America and Asia show comparable performance levels at about \$150,000 each. The notable 40% higher revenue in South America compared to other regions indicates exceptional market penetration or particularly effective regional business strategies in this area. This suggests potential for knowledge transfer of successful South American practices to boost performance in other regions.

### 3. Customer Signup Trends



Customer Signup Trends (100 words) The customer signup trend demonstrates a clear V-shaped pattern over three years. Starting at around 64 signups in 2022, the numbers declined steadily to reach their lowest point of approximately 57 signups in 2023. However, there's a remarkable recovery post-2023, with signups increasing dramatically to nearly 80 by 2024. This represents a 40% growth from the lowest point, suggesting successful implementation of new customer acquisition strategies or market expansion initiatives. The steep upward trajectory in the most recent period indicates strong business momentum and effective customer engagement.

## 4. Category Popularity



The product category distribution shows a relatively balanced mix across four main segments. Electronics leads with a 25.4% share, followed closely by Books at 27.0%. Home Decor accounts for 24.8% of the total, while Clothing represents 22.8%. The fairly even distribution, with just a 4.2% difference between the highest and lowest categories, suggests a well-diversified product portfolio. Electronics and Books together make up over half (52.4%) of the total, indicating a strong consumer preference for technology and educational/entertainment products. This balanced spread helps maintain business stability through category diversification.

## 5. Seasonal Sales Trends

Sales data reveals a significant spike during the last quarter (Q4), with transactions peaking in November and December. This surge aligns with global holiday shopping patterns, such as Black Friday and Christmas. Q4 sales are consistently 30-40% higher than other quarters, showcasing the importance of seasonal demand.