

EDA's Visual Insights:

1. Monthly Transaction Trends

The bar chart of monthly transactions shows a consistent number of transactions across most months in 2024, peaking in January. December 2023 has significantly fewer transactions, possibly due to the data's start date or seasonal factors. The steady trends across other months suggest a stable customer activity rate, with no drastic seasonal spikes aside from January.

2. Revenue by Region

The revenue breakdown highlights South America as the highest contributor, followed by Europe, Asia, and North America. South America's dominance could reflect either a higher customer base or higher spending per transaction. Meanwhile, North America shows lower revenue, suggesting fewer customers, smaller transactions, or less engagement compared to other regions.

3. Popular Products

The top-selling product, the Active Wear Smartwatch, dominates in quantity sold, followed by Sound Wave Headphones and HomeSense Desk Lamp. This suggests a customer preference for tech and lifestyle products. Books and apparel, such as the BookWorld Biography and Tech Pro T-Shirt, also appear popular, showing balanced customer demand across categories.

4. Customer Signups by Region

Customer signups are relatively balanced across regions, with South America leading. This reflects the region's potential for driving both customer acquisition and revenue. However, Asia and Europe also show high signup activity, signaling a broad opportunity to expand customer engagement in these regions.

5. Sales-Product Connection

The top product categories align well with regional trends, as higher-selling products (e.g., tech-focused items) likely drive South America's dominant revenue position. Cross-referencing product popularity with regional data could provide deeper insights into targeting marketing and sales strategies regionally.