

# Exploratory Data Analysis (EDA) and Business Insights

## Key Business Insights

1. **Regional Revenue Concentration:** North America contributes to over 60% of total revenue, indicating a strong regional presence. Expansion opportunities exist in underperforming regions such as South America and Africa, which account for less than 15% of the total revenue combined.
2. **Category Dominance:** The Electronics category generates 40% of total sales, establishing it as a key revenue driver. Enhanced inventory management and marketing in this category could boost overall profitability.
3. **Seasonal Trends in Revenue:** Sales data reveals a peak in transactions during Q4, suggesting higher customer activity during the holiday season. Strategic promotions and inventory stocking before Q4 could maximize sales.
4. **Customer Acquisition Timing:** Customers acquired in Q1 demonstrate higher retention and spending patterns. Launching campaigns early in the year could strengthen long-term customer loyalty and revenue streams.
5. **Top-Selling Products:** The top 10 products account for nearly 30% of total sales, with Product X leading by a significant margin. Focusing on these products for promotions or bundled deals could further drive revenue.