

# **Key Business Insights Derived from Exploratory Data Analysis (EDA)**

## **1. Regional Distribution of Customers**

The majority of customers are from North America and Europe, showcasing strong markets in these regions. However, regions like Africa and South America have lower customer counts, indicating untapped growth opportunities. Expanding into these regions with tailored marketing strategies could increase the company's global footprint.

## **2. Popular Product Categories**

Categories such as "Electronics" and "Home Appliances" dominate sales, accounting for the highest transaction volumes. These categories are crucial revenue drivers. To maximize growth, the company can focus on maintaining a consistent supply chain and offering discounts or bundles to further boost these products' sales.

## **3. Seasonal Sales Trends**

The sales analysis highlights a significant increase in transactions during holiday seasons like November and December. This indicates seasonal shopping trends. To capitalize on this behavior, the company can implement aggressive holiday marketing campaigns and special offers to further increase revenue during these periods.

## **4. High Revenue-Generating Products**

Premium products like high-end electronics contribute a significant portion of total revenue. These products have a higher profit margin and consistent demand. The company should focus on promoting these products through targeted advertisements and ensure their availability to sustain high revenue growth.

## **5. Spending Behavior of Key Customers**

High-value customers often make bulk purchases and prefer premium products. To retain these customers and encourage repeat purchases, the company can implement loyalty programs, personalized discounts, or exclusive product previews to improve engagement and drive long-term profitability.