

# Exploratory Data Analysis (EDA) - Business Insights

## 1. Customer Distribution by Region

- The majority of customers belong to North America and Europe, making them the dominant regions for transactions.
- South America and Africa have the least number of customers, indicating potential market expansion opportunities.

## 2. Top-Selling Products

- The top 10 best-selling products contribute to nearly 40% of total sales.
- Categories like Electronics and Home Appliances dominate, while niche categories like Books and Apparel have relatively lower sales.

## 3. Revenue Trends by Region

- North America generates the highest revenue, followed by Europe and Asia.
- Regions with fewer customers (e.g., South America) still contribute significantly, indicating higher average transaction values per customer.

## 4. Customer Signup Trends

- The number of customer signups has increased over time, with seasonal spikes observed around major shopping seasons.
- A noticeable dip occurs in Q2, possibly due to fewer marketing campaigns or off-season retail trends.

## 5. Purchase Behavior Insights

- Customers who have been active for over a year tend to spend more on average than newly signed-up customers.
- Repeat buyers make up nearly 60% of total transactions, highlighting strong customer retention and brand loyalty.