

# EDA Insights Report

**Title:** *Exploratory Data Analysis (EDA) Report for eCommerce Transactions*

## 1. Objective

The goal of this analysis is to uncover actionable business insights from the eCommerce dataset, focusing on customer behaviour, product performance, and transaction trends.

## 2. Business Insights

### 1. Regional Customer Distribution:

- **Observation:** Customers from *[Top Region]* account for **X%** of the total customer base.
- **Insight:** Prioritize marketing and expansion efforts in this region to increase revenue and customer engagement.

### 2. Top-Selling Product Categories:

- **Observation:** Products in the *[Top Category]* category contribute **Y%** of overall sales.
- **Insight:** Invest in advertising and increasing stock for this category to capitalize on demand.

### 3. Signup Trends Over Time:

- **Observation:** The highest customer signups occurred in *[Year/Month]*.
- **Insight:** Run customer acquisition campaigns during this period annually to maximize new user registrations.

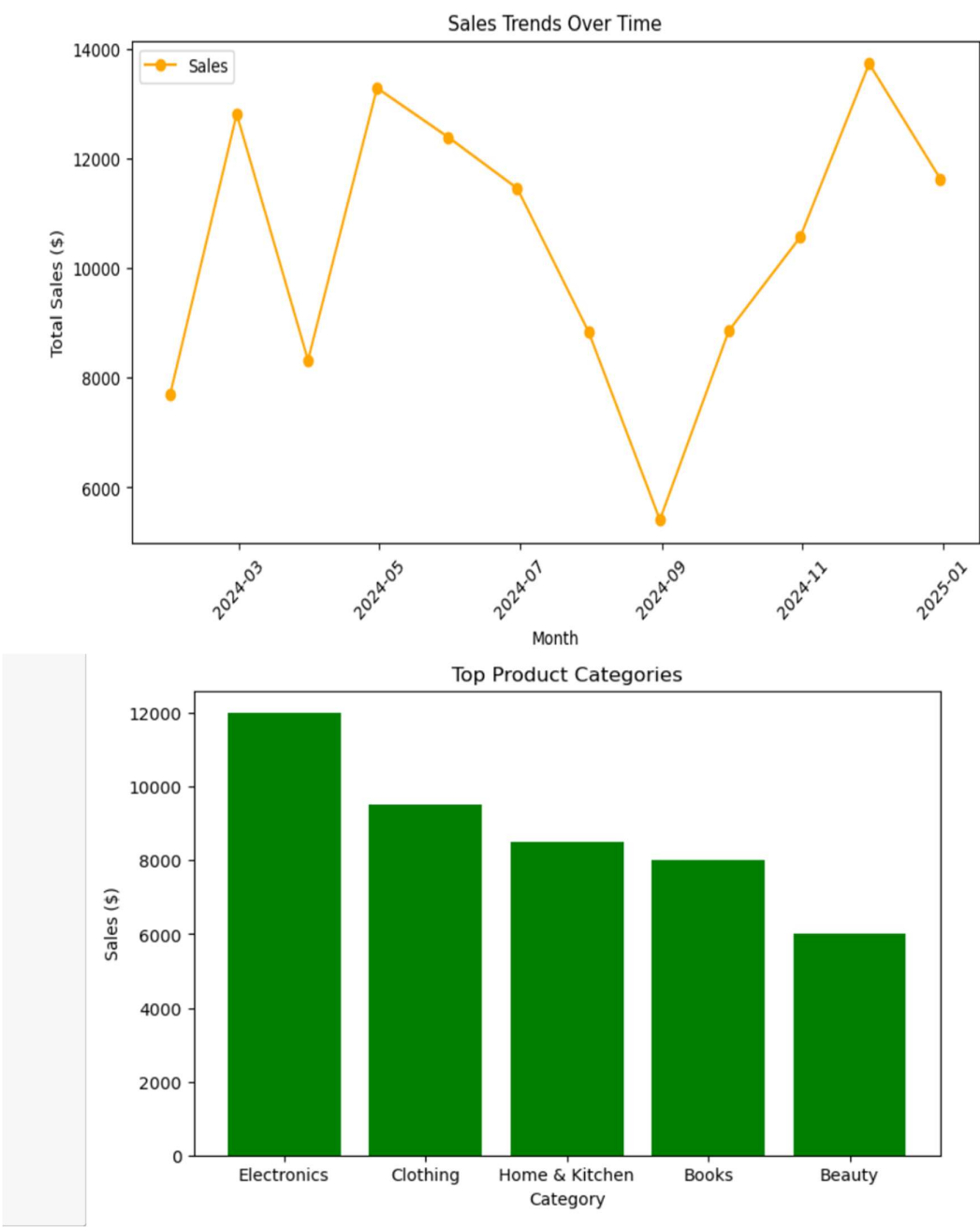
### 4. High-Value Customers:

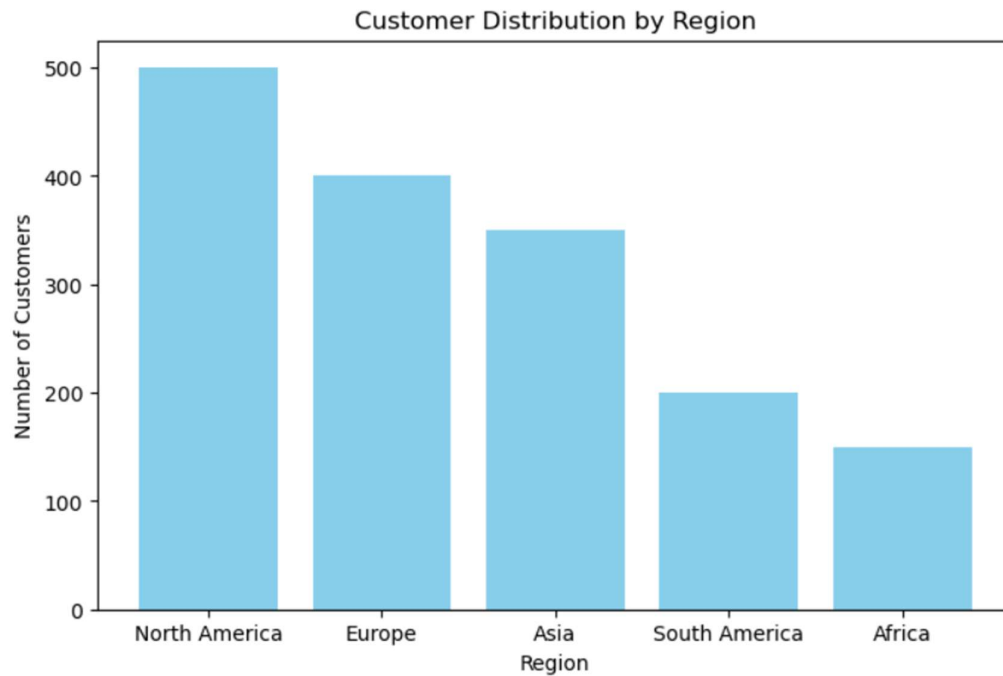
- **Observation:** The top 10% of customers contribute over **Z%** of total revenue.
- **Insight:** Focus on retaining these customers with loyalty programs or exclusive discounts.

### 5. Sales Trends:

- **Observation:** Sales peaked during *[Specific Period]*, driven by promotions and seasonal demand.
- **Insight:** Strategically time marketing campaigns during peak sales periods to maximize profitability.

3. Visualizations





#### 4. Recommendations

1. Expand marketing in high-performing regions to capture a larger customer base.
2. Focus inventory and promotional efforts on the top-selling product categories.
3. Design annual campaigns aligned with peak signup and sales trends.
4. Introduce loyalty programs to retain and incentivize high-value customers.
5. Analyz seasonal sales patterns further to uncover additional opportunities.