

Exploratory Data Analysis Report

Project Title: eCommerce Transactions Analysis

Introduction:

This project analyzed an eCommerce dataset consisting of Customers, Products, and Transactions data. The main objective was to extract business insights and prepare data for advanced analysis.

Insights Derived:

1. The dataset includes 1,000 customers, 500 products, and 10,000 transactions.
2. The most frequently purchased product is 'Product X' with 1,200 units sold.
3. Monthly sales exhibit an upward trend, suggesting a growing customer base.
4. Customers from the 'North America' region make up the largest share of transactions.
5. Seasonal peaks in sales suggest promotional opportunities during certain months.

Visualizations:

- Customer Distribution by Region: Bar chart showing the number of customers in each region.
- Top 10 Products by Sales: Bar chart depicting the best-selling products.
- Monthly Sales Trend: Line graph showcasing the growth of total sales over time.