Exploratory Data Analysis (EDA) and Business Insights

Business Insights Report

This report presents key business insights derived from exploratory data analysis of the provided customer, product, and transaction datasets. The analysis aims to identify trends, revenue drivers, and customer behaviors to inform strategic decisions.

Key Business Insights with Details

- **Top Products:** The most frequently purchased products are:

  - ✓ Product A (2 times)
  - ✓ Product B (2 times)
  - ✓ Product C (1 time)

  These products should be prioritized for inventory planning and promotions.

- **Top Customers:** The most profitable customers, ranked by their total contribution to revenue, are:

  - ✓ Bob ($306)
  - ✓ Alice ($305)
  - ✓ Charlie ($303)

  These high-value customers present opportunities for targeted marketing and loyalty programs.

- **Repeat Customers:** There are 2 repeat customers who made multiple transactions. Efforts to engage these customers further can enhance retention rates.

- **Revenue by Region:** The North region generated the highest revenue ($608), followed by the South region ($306). These insights can guide expansion and regional marketing strategies.

- **Monthly Sales Trends:** The total sales for each month indicate seasonal patterns:

  - ✓ January ($202)
  - ✓ February ($102)
  - ✓ March ($103)
  - ✓ April ($303)
  - ✓ May ($204)

  This insight can guide promotional timing and inventory management.