

# Customer Purchase Analysis – Business Insights

## Project Overview:

The objective of this analysis is to understand customer purchasing behavior, identify trends, and provide actionable business insights. By analyzing sales data, we can improve business decision-making related to product strategy, customer retention, and marketing campaigns.

## Key Findings from Analysis:

- **Total Revenue:**

The total revenue generated from customer purchases is \$53697.05

- **Most Popular Product Category:**

The top-selling category is [Electronics/Clothing/etc.], accounting for the highest number of transactions.

- **Highest Spending Customers:**

The top 5 customers with the highest spending contributed 5.01% of total revenue.

- **Average Purchase Amount by Region:**

Customers from the [West/East] region spent the most on average, with an average purchase amount of \$272.00

- **Most Used Payment Method:**

Most transactions were made using [Credit Card/PayPal/etc.], indicating customer preference for online payments.

## Business Recommendations

- **Increase Marketing on Best-Selling Products:**

Focus promotions on [Electronics/Clothing] to maximize sales.

- **Target High-Spending Customers for Retention Programs:**

Offer personalized discounts or loyalty programs for repeat customers.

- **Improve Regional Sales Strategies:**

Increase advertising in high-spending regions to drive more revenue.

- **Optimize Payment Options:**

Consider offering incentives for most-used payment methods to encourage repeat purchases.

## Suggested Power BI / Tableau Dashboards

To visualize these insights effectively, the following dashboards can be created:

1 Sales Breakdown by Product Category (Bar Chart)

2 Total Revenue by Region (Geographical Map)

3 Top Spending Customers (Table with total spending per customer)

4 Popular Payment Methods Used (Pie Chart)

## **Files in This Project**

- customer\_purchase\_data.csv → Raw dataset
- analysis.sql → SQL queries used for data analysis (to be uploaded soon)
- dashboard.pbix → Power BI dashboard (to be uploaded soon)
- Insights.md → This business report

## **Next Steps:**

Improve this analysis by adding predictive analytics (customer segmentation, retention modeling) and refining dashboards.

Author: Shalika Vuppula

Email: [shalikareddy25@gmail.com](mailto:shalikareddy25@gmail.com)

Phone: +1 737-346-2601