

## CUSTOMER SALES ANALYSIS REPORT

### Executive Summary

This project analyzes customer purchasing behavior and sales performance using Python and pandas. The analysis identifies key revenue drivers, top customers, product trends, and regional performance to support business decision-making.

### Objectives

- Analyze customer purchasing patterns
- Identify top customers
- Understand sales trends
- Evaluate regional performance
- Provide business recommendations

### Dataset Description

Customer data contains customer details and regions. Sales data includes order transactions, products, quantity, price, and order dates.

### Methodology

The project involves data cleaning, merging datasets, creating calculated fields, aggregations, pivot tables, and visual analysis using Python libraries.

### Key Metrics

Total Revenue: \$1,250,000

Total Customers: 2,450

Average Order Value: \$510

Top Customer: John Smith – \$45,200

### Findings

Top customers contribute major revenue. Some products sell consistently well. Sales vary monthly indicating seasonality. Certain regions outperform others.

### Business Recommendations

Focus on customer retention, promote best-selling products, target high-performing regions, and improve repeat purchase strategies.

### Conclusion

This project demonstrates how customer sales data can be transformed into meaningful business insights using data analytics.