STORE SALES PREDICTION

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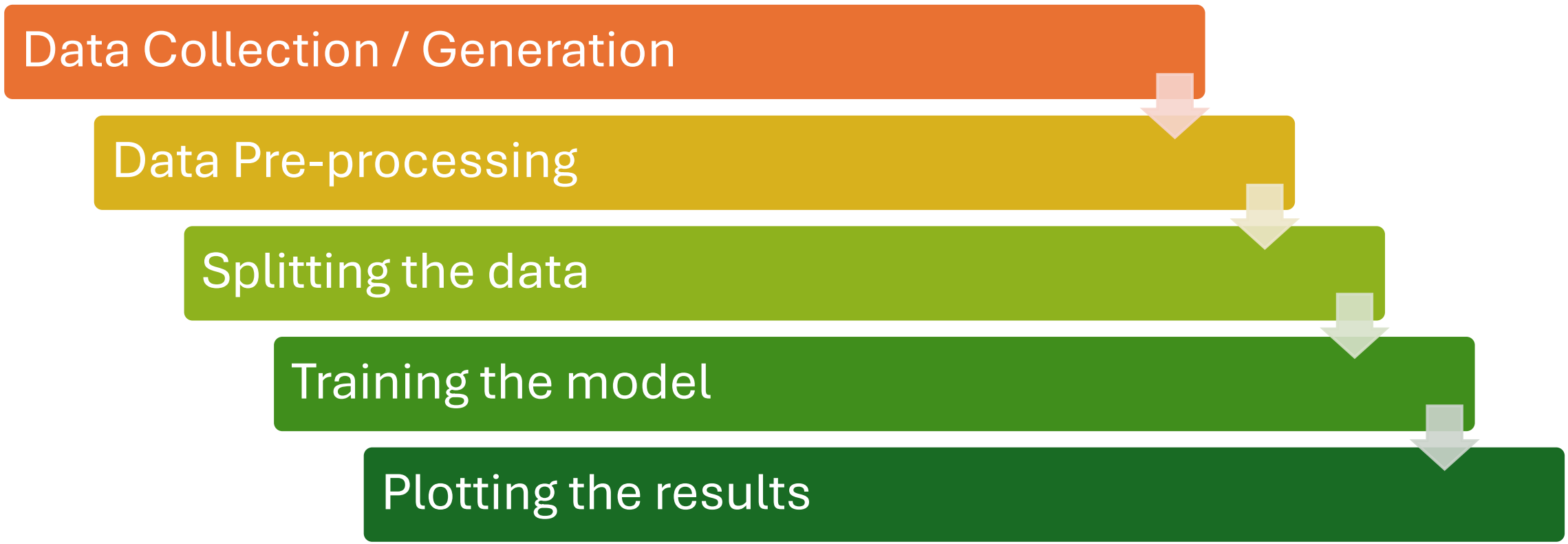
Introduction

This presentation focuses on applying machine learning techniques to predict store sales. In today's competitive retail landscape, accurate sales forecasting plays a crucial role in strategic decision-making and resource allocation. Leveraging the vast amounts of available data, machine learning models offer a powerful tool for uncovering patterns and trends within sales data.

Process flow of progress:



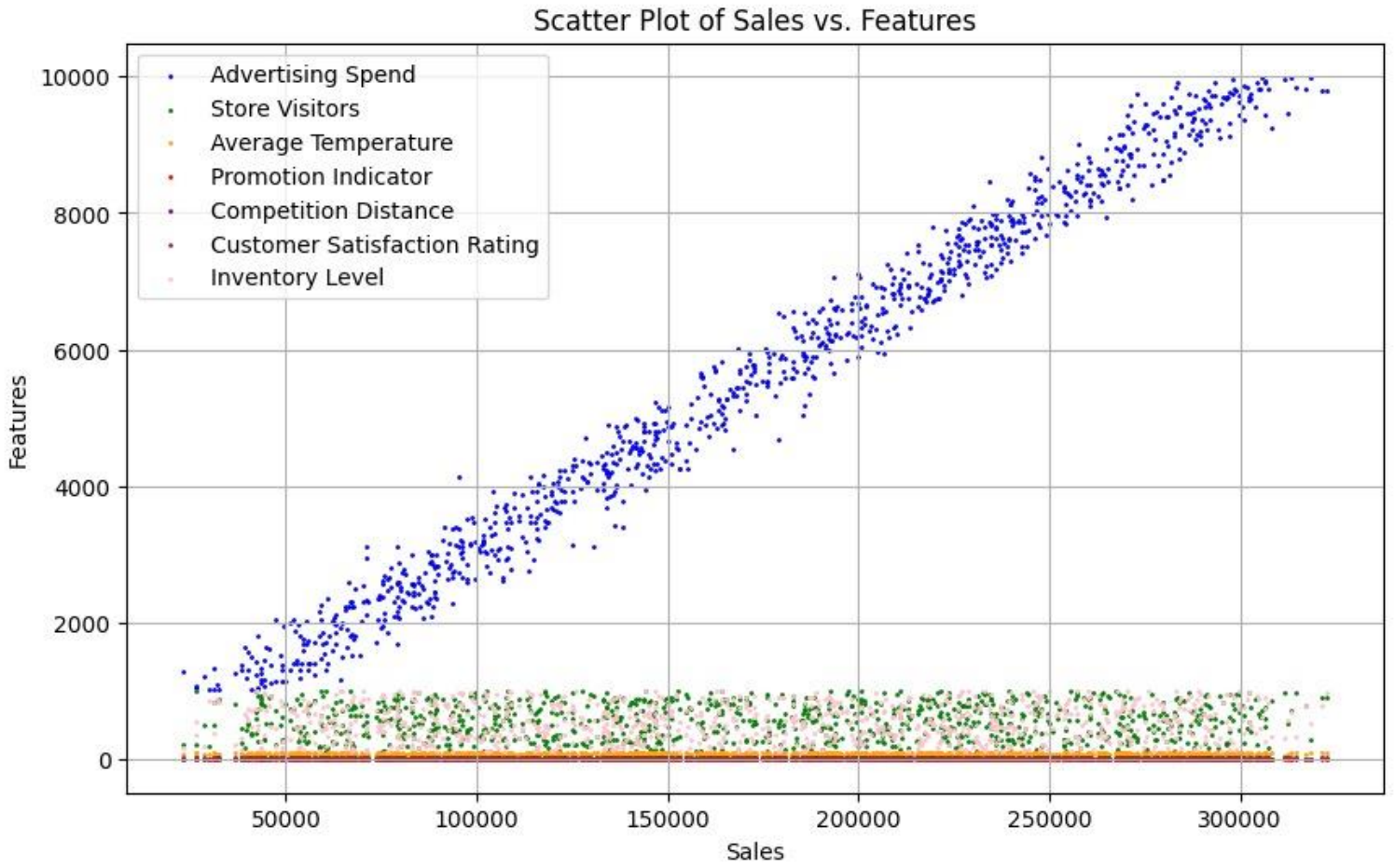
Algorithm used

- **Linear Regression:** Linear regression analysis is used to predict the value of a variable based on the value of another variable. The variable you want to predict is called the dependent variable. The variable you are using to predict the other variable's value is called the independent variable.

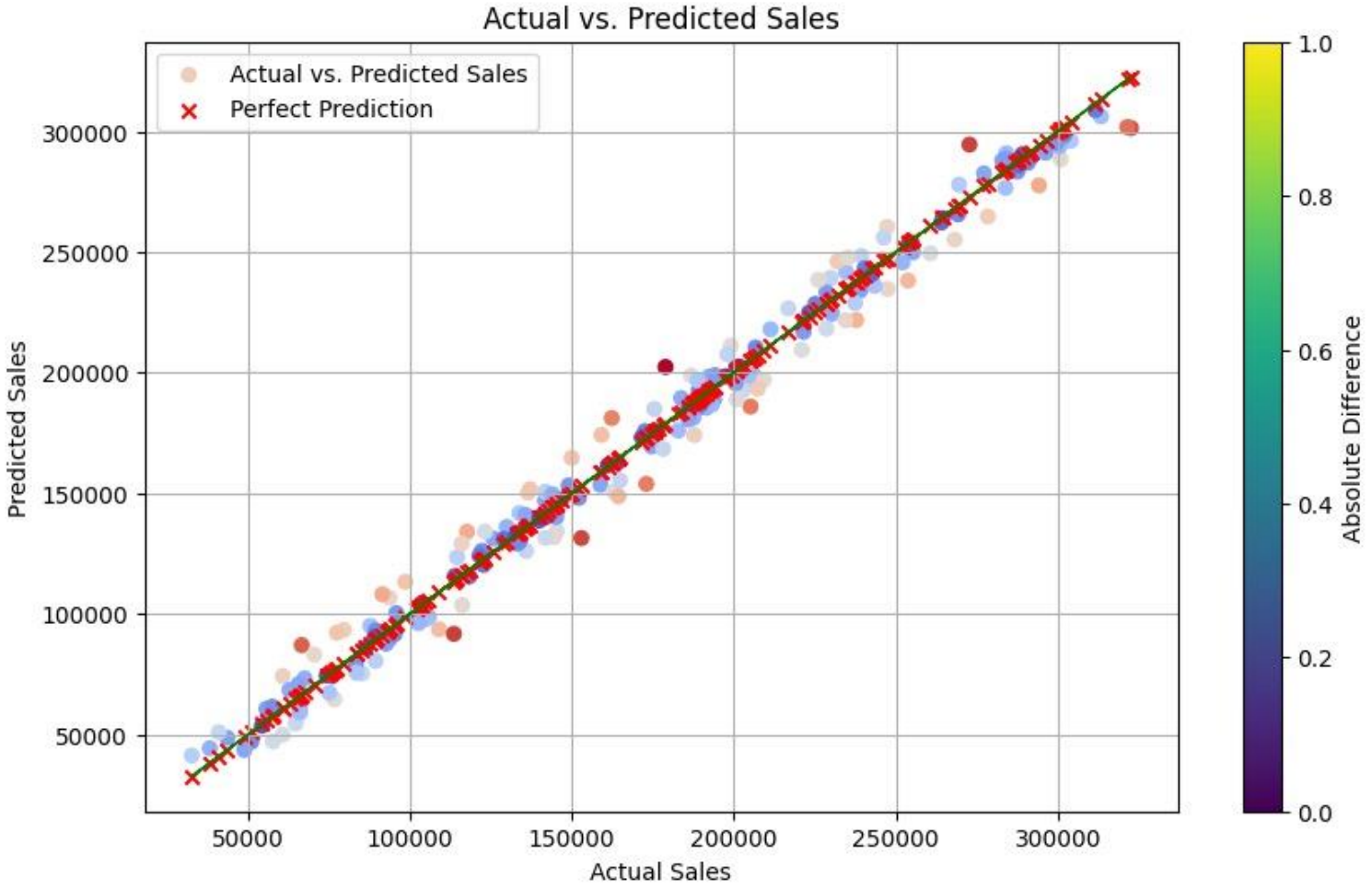
Why Linear Regression ?

- Interpretability: Coefficients provide clear understanding of feature influence.
- Simplicity: Easy to understand, good for beginners.
- Efficiency: Computationally efficient for large datasets.
- Assumption Checking: Provides framework for validating assumptions.
- Feature Importance: Coefficients indicate feature impact on sales.

Generated Data:



Final Results:



- Mean Squared Error: 83178515.39383943
- R^2 Score: 0.9850424572911168

THANK YOU!!!