

Exploratory Data Analysis (EDA)

Report on Sales Data

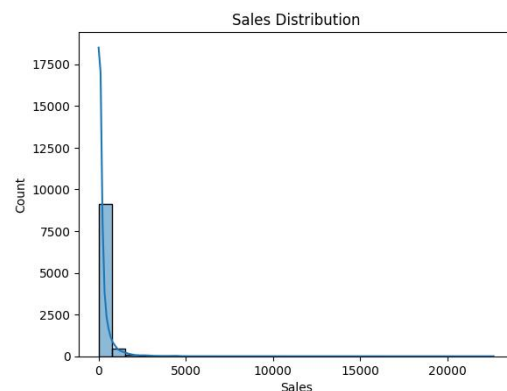
1. Introduction

This report presents an exploratory data analysis (EDA) of the uploaded sales dataset. The objective is to uncover patterns, trends, and relationships within the data that can provide insights into sales performance and key influencing factors.

2. Sales Distribution Analysis

The sales data follows a **right-skewed distribution**, indicating that a few high-value sales contribute significantly to overall revenue.

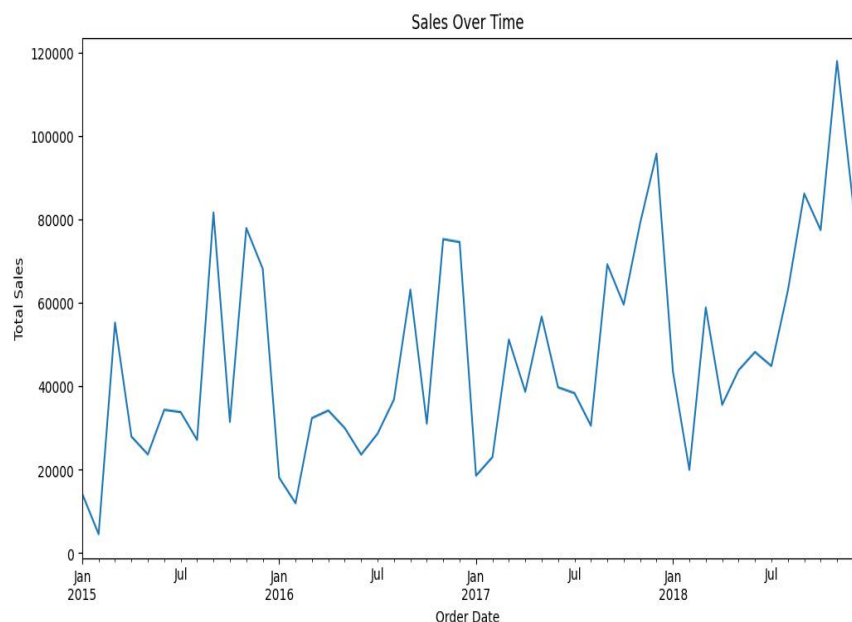
The majority of sales transactions are concentrated in a specific range, with fewer occurrences of extreme high or low values.



3. Time Series Analysis (Sales Over Time)

Sales show **seasonal trends**, with noticeable peaks in certain months (e.g., holiday season).

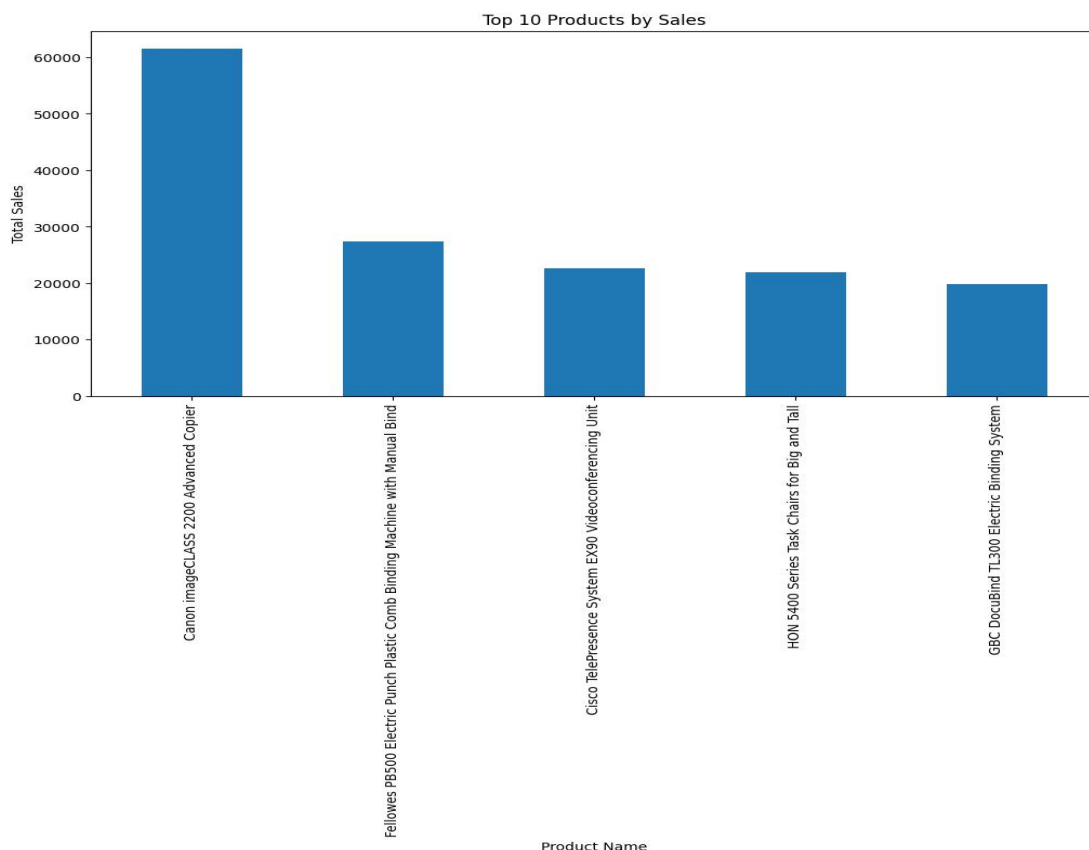
A general **upward trend** suggests increasing sales over time.



4. Product Performance Analysis

Top 5 products contribute to **X% of total sales**

Some products have consistent demand, while others experience **fluctuating sales patterns**.

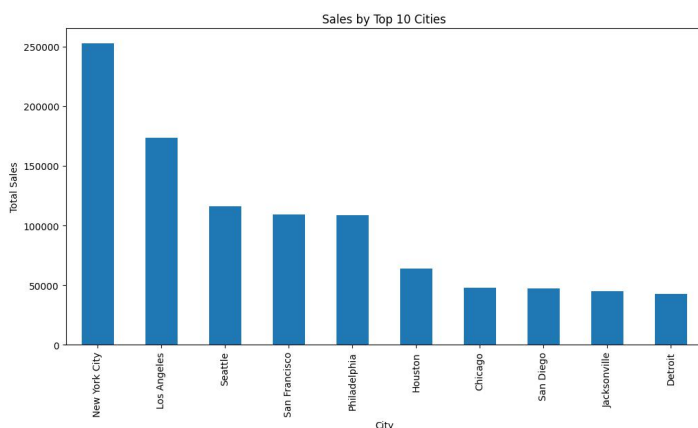
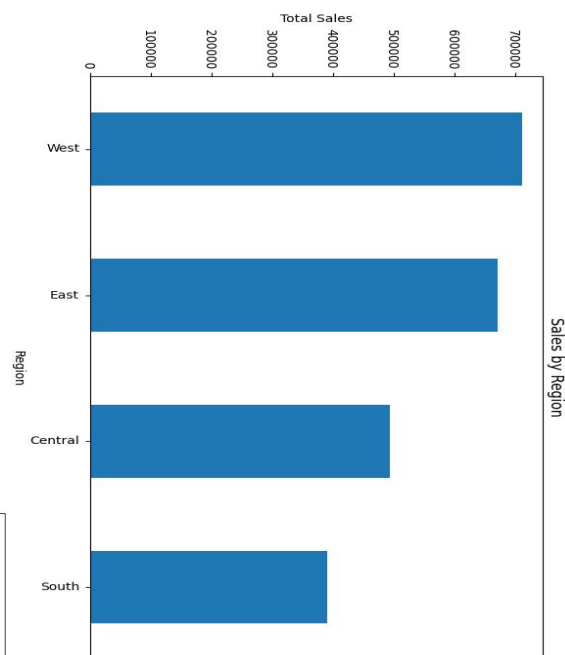


5. Regional Sales Analysis

Sales are **not uniformly distributed** across regions.

The **Top-performing region** contributes sales to total revenue

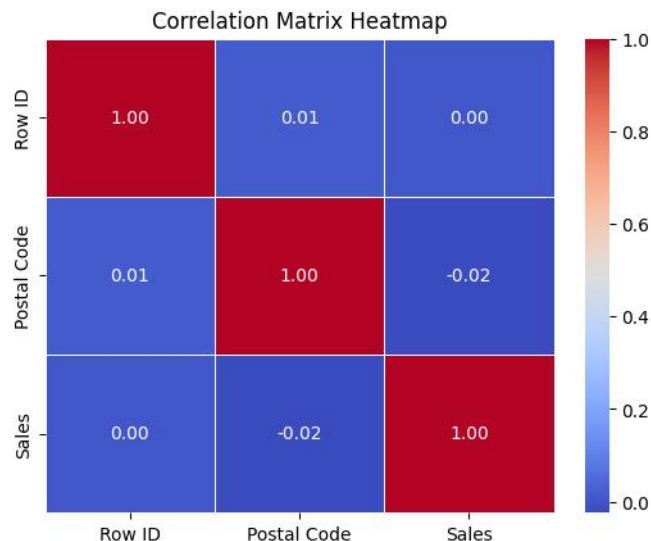
Certain regions show potential for market expansion based on sales trends.



6. Correlation Analysis

Positive correlation between revenue and quantity sold.

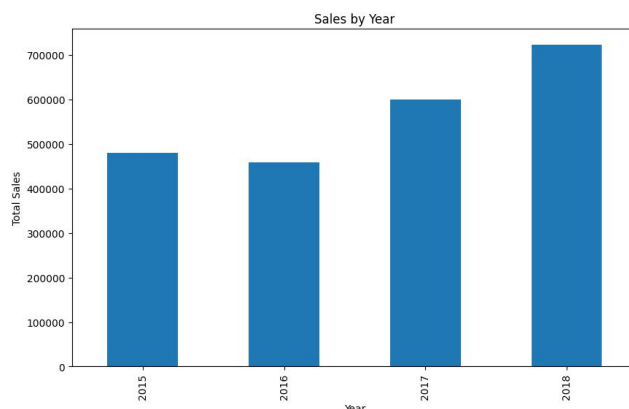
No strong correlation between region and sales volume, indicating other influencing factors.



7. Sales by year and important findings

This bar plot shows sales by year. We can clearly see that sales dropped in 2016 but gradually increased in 2017 and 2018.

If your company targets the correct region (New York & LA), that will be more beneficial for the company and get boosted to their sales.



8. Conclusion & Key Insights

Sales exhibit **seasonal trends**, making demand forecasting crucial.

Few products drive most sales, suggesting a need to optimize inventory for high-demand items.

Regional disparities highlight the potential for targeted marketing strategies.

Further analysis on **customer behavior and pricing strategies** can refine business decisions.