

In this project, we analyze supermarket sales data to derive actionable insights and develop a strategic plan for optimizing sales. The dataset includes sales transactions from multiple departments, cities, and payment methods. We perform data cleaning, exploratory data analysis (EDA), and generate visualizations to understand sales trends across different dimensions all done using Python scripting.

Key highlights of the analysis include :

**Total and Average Sales by Department:** Identifying top-performing departments and evaluating their average sales performance.

**Seasonal Trends:** Analyzing sales data across different months to determine peak sales periods.

**Sales by City and Payment Method:** Understanding the relationship between sales performance, city locations, and preferred payment methods.

**Customer Types:** Examining sales by customer type to tailor marketing efforts.

Based on these insights, a detailed sales strategy is developed for the highest-performing department, including promotional campaigns, marketing strategies, and expected outcomes.