SUMMARY REPORT

Project Objective:

The objective of the Diwali Sales Analysis project is to explore and analyze sales data from a Diwali sales event, identifying patterns and trends in customer purchasing behavior. This helps businesses tailor their marketing strategies and product offerings to target the most active buyers effectively.

Libraries Used:

Pandas : Used for data manipulation and analysis. It helps in loading, cleaning, and preprocessing the data.

Numpy : Utilized for numerical operations and handling arrays.

Seaborn : Used for creating visualizations and plots. It offers an interface for drawing attractive and informative statistical graphics.

Visualizations:

1.Gender Analysis : Bar charts showing the count and total amount spent by different genders.

2.Age Group Analysis : Bar charts displaying the distribution and spending by different age groups.

3.State-wise Analysis : Bar charts for sales and order distribution across different states.

4.Marital Status Analysis : Count and total amount spent by marital status and gender.

5.Occupation Analysis : Bar charts showing sales distribution among various occupations.

6.Product Category Analysis : Bar charts highlighting the popularity of different product categories.

Key Points and Insights:

1.Gender : Most buyers are females, with higher purchasing power than males.

2.Age Group : The majority of buyers are aged 26-35 years, with females leading the spending.

3.State-wise : Uttar Pradesh, Maharashtra, and Karnataka have the highest number of orders and sales.

4.Marital Status : Married women are the most prominent buyers with high purchasing power.

5.Occupation : Buyers predominantly work in IT, Healthcare, and Aviation sectors.

6.Product Categories : Food, Clothing, and Electronics are the most sold product categories.

Conclusion:

The analysis reveals that married women aged 26-35 from Uttar Pradesh, Maharashtra, and Karnataka, working in IT, Healthcare, and Aviation, are more likely to buy products from Food, Clothing, and Electronics categories during the Diwali sales event.