## **Summary Report: Lead Scoring Case Study**

### **Objective**

The primary goal of this analysis was to identify factors influencing lead conversion and provide actionable recommendations to enhance conversion rates. This involved analysis lead data for trends, key performance indicators (KPIs), and potential improvement areas.

#### **Process Followed**

### 1. Data Understanding and Preparation

- The dataset was reviewed to understand variables like source of leads, time spent on the platform, and conversion status.
- Missing values and outliers were handled to ensure data reliability.
- Categorical variables were encoded, and numerical variables were binned or scaled for effective analysis.

### 2. Exploratory Data Analysis (EDA)

- Visualizations such as bar charts and histograms were used to understand distribution and relationships.
- KPIs like conversion rates by source and average time spent were calculated to identify significant patterns.

# 3. Key Insights Extraction

- Sources were ranked based on lead quality (conversion rates).
- A clear correlation between engagement (time spent) and likelihood of conversion was observed.
- High-value leads were identified using scoring methods based on multiple variables.

# 4. Modelling and Scoring

- Predictive models (e.g., logistic regression or decision trees) were implemented to score leads and identify factors with the highest predictive power.
- Validation was conducted to ensure the accuracy of predictions.

#### 5. Recommendations

- Allocate resources to high-performing sources and optimize underperforming ones.
- Enhance user engagement strategies to increase time spent by leads.
- Continuously monitor and adjust strategies based on periodic analysis.

# **Key Learnings**

- 1. **Data Quality is Crucial**: Addressing missing values and outliers significantly improves analysis outcomes.
- 2. **EDA Drives Insights**: Visualization and segmentation are vital to uncover trends and relationships in data.
- 3. **Engagement Matters**: Time spent and interaction levels strongly influence conversion rates.
- 4. **Iterative Improvement**: Data-driven decisions require regular updates to account for changing trends.

#### Conclusion

This analysis provided actionable insights into lead behaviour and highlighted areas for improvement in lead scoring strategies. By focusing on high-performing sources and enhancing user engagement, businesses can significantly improve conversion rates. The learnings from this project emphasize the importance of continuous monitoring and adaptation in a competitive environment.