Lead Scoring Summary Report

Introduction

In this case study, we analyze a dataset of leads to optimize the sales funnel and improve lead conversion rates. The goal is to identify high-priority leads, understand the factors influencing conversion, and provide actionable insights to the business team.

Business Problem

The sales team is overwhelmed with numerous leads, and it is challenging to focus on the most promising ones. The primary objective is to use data to build a model that identifies hot leads, cold leads, and insights into the lead funnel to make sales efforts more efficient.

Solution Approach

The logistic regression model was developed to predict lead conversion. Key steps include:
1. Data Cleaning: Missing values were handled, and numerical features were normalized.
2. Feature Engineering: Categorical variables were encoded using one-hot encoding.
3. Model Evaluation: Metrics such as accuracy, precision, recall, and F1-score were used to evaluate performance.

The model identifies hot leads with high accuracy, enabling the sales team to prioritize their efforts.

Key Insights

Top Predictors:

Tags ("Will revert after reading the email," "Closed by Horizzon").
Total Time Spent on Website (high engagement).
Lead Source ("Direct Traffic" and "Reference").

Lead Segmentation:

High-Scoring Leads (>80): Immediate follow-up priority.
Medium-Scoring Leads (50–80): Targeted nurturing.
Low-Scoring Leads (<50): Long-term automated campaigns.

Recommendations

1. For Aggressive Conversion:
   Focus on high-scoring leads and involve interns for broader reach.
   Track engagement metrics post-phone calls to ensure success.

2. For Relaxed Periods:
   Restrict calls to high-probability leads (>90%).
   Use emails/SMS for medium and low-probability leads.

3. Continuous Optimization:
   Periodically retrain the model to adapt to new data.
   Analyze false positives/negatives for further refinement.

Conclusion:

The Logistic Regression model provides actionable insights and a reliable lead scoring mechanism. By integrating the model into CRM tools and following the recommended strategies, X Education can significantly enhance lead conversion rates and optimize sales efforts.