LEAD SCORING CASE STUDY SUMMARY REPORT

1. Problem Statement:

X Education aims to identify potential leads with a higher conversion probability.

2. Data Preparation:

- Data is cleaned and formatted for analysis.

- Duplicate data is removed.

- Outliers are treated.

3. Exploratory Data Analysis (EDA):

- Key variables impacting conversion rate are identified.

- Variables like 'Do Not Email,' 'Total Time Spent on Website,' and others are studied for insights.

4. Feature Scaling & Splitting:

- Numeric data is standardized.

- Data is split into training and test sets.

5. Feature Selection:

- Recursive Feature Elimination (RFE) is used with Logistic Regression.

- Important features are determined for the model.

6. Model Building:

- Logistic Regression model is used.

- Model performance metrics like accuracy, sensitivity, specificity, etc., are calculated.

7. Cutoff Threshold Analysis:

- Optimal cutoff threshold is determined using sensitivity and specificity metrics.

- Model evaluation is conducted on both train and test sets.

8. Lead Score Assignment:

- Leads are assigned Lead Scores based on the model's predictions.

9. Conversion Rate Analysis:

- Conversion rate is checked based on Lead Scores.

- Model **performance is evaluated** against the desired 80% conversion rate.

10. Conclusion:

- The model's performance is robust.

- Sensitivity, specificity, and accuracy metrics align with the target.

- Lead Scoring strategy can help prioritize leads during intern phase.

11. Recommendation:

- Focus on leads predicted with high probability (Lead Score close to 1) during intern phase.

- Personalize outreach strategies and provide aggressive follow-up.

- Implement incentives and feedback loops for intern training and improvement.

12. Future Enhancements:

- Continuously refine strategy based on real-time data analysis.

- Monitor intern performance and adapt strategies for optimal conversion.

By following these steps, X Education can effectively use Lead Scoring to enhance lead conversion rates during the intern period.