

Lead Scoring Model for X Education: Summary Report

This report presents a predictive lead scoring model for X Education, designed to prioritize high-potential leads and optimize sales conversions. The model assigns a lead score between 0 and 100, helping the sales team focus on leads with the highest likelihood of conversion.

Methodology

1. **Data Preprocessing:** Missing values were handled, categorical variables were encoded, and numerical features were scaled to standardize the dataset.
2. **Model Training:** A logistic regression model was trained on an 80-20 train-test split.
3. **Feature Importance:** Key influencing factors in lead conversion were identified.
4. **Lead Scoring:** The model predicts conversion probability and assigns scores accordingly.

Key Findings

- Average Lead Score for Converted Leads: 86.68
- Average Lead Score for Non-Converted Leads: 8.20
- Top Positive Factors for Conversion:
 - Tags_Will revert after reading the email
 - Tags_Unknown
 - Tags_Closed by Horizon
- Top Negative Factors for Conversion:
 - Lead Source_Reference
 - Tags_switched off
 - Specialization_Unknown

Business Recommendations

- For Aggressive Lead Conversion:
 - Prioritize leads with a score above 70.
 - Use SMS and email follow-ups before making calls.
 - Allocate interns for follow-ups and increase call frequency.
- For Reducing Unnecessary Calls:
 - Call only leads with a score above 90.
 - Use email/SMS over calls for lower-priority leads.
 - Focus sales efforts on high-converting segments.

Conclusion

The lead scoring model provides a **data-driven approach** to enhance X Education's sales efficiency. With an average lead score of 86.68 for converted leads and 8.20 for non-converted leads, the model effectively differentiates high and low-potential leads. By leveraging these insights, the company can significantly improve conversion rates while optimizing resource allocation. Further enhancements such as hyperparameter tuning and class balancing can refine the model's effectiveness.