Lead Conversion Optimization for X Education

Presented by:

Dipmala Mane

Mohammad Asgar

Kiran Kumar Reddy Ginkala

Problem Statement

Current Issue:

X Education has a low lead conversion rate (~30%).

Goal:

Identify high-potential leads to improve efficiency and achieve an 80% conversion rate.

Data Understanding & Preprocessing

Dataset Overview:

9,240 leads with 37 attributes.

Data Cleaning:

Removed 'Select' values, handled missing data.

Dropped columns with >50% missing values.

Handled duplicates.

Feature Engineering:

Encoded categorical data and standardized numerical values.

Exploratory Data Analysis

Insights from Features:

- Total Time Spent on Website: High correlation with conversions.

- Lead Source: Some channels perform better than others. Google, and Direct Traffic perform best.

- Last Activity: Interaction frequency matters. : Frequent interactions increase conversion probability.

Visualizations:

Distribution plots, correlation heatmaps. Histogram of website visit duration suggests higher engagement increases conversions.

Model Building & Evaluation

Model Used:

Logistic Regression for lead scoring.

Achieved Accuracy:

96.88 .

Performance Metrics:

ROC-AUC curve, Confusion Matrix.

Feature Importance:

Total Time Spent on Website & Lead Source are top predictors.

Business Recommendations

Strategies
- Prioritize Leads Spending More Time on the Website
- Focus on High-Converting Lead Sources

Aggressive Lead Conversion Phase
- Increase follow-ups for Lead Score > 80
- Offer discounts or personalized counseling
- Prioritize email campaigns and webinars

Reduced Outreach Phase
- Only call leads with Lead Score > 90
- Use automated email follow-ups
- Focus sales team on data analysis

Intern Hiring Phase:

- Aggressive outreach.
- increased calls.
- personalized engagement.

Target Met Phase:

- Reduce unnecessary calls,
- on high-probability leads.

Aggressive Lead Conversion Phase

•Increase phone calls and follow-ups for leads with **Lead Score > 80**.

•Offer **discounts or personalized counseling** for high-score leads.

•Prioritize **email campaigns and webinar invites**.

Reduced Outreach Phase

•Only call leads with **Lead Score > 90**.

•Use **automated email follow-ups** for lower-score leads.

•**Focus sales team on other tasks** like analyzing past conversions.

Adaptive Sales Strategies

Aggressive Lead Conversion Phase:

•Increase phone calls and follow-ups for leads with **Lead Score > 80.**

•Offer discounts or personalized counseling for high-score leads.

•Prioritize email campaigns and webinar invites.

Reduced Outreach Phase:

•Only call leads with **Lead Score > 90.**

•Use automated email follow-ups for lower-score leads.

•Focus the sales team on other tasks like analyzing past conversions.

Conclusion

Impact of Predictive Modeling:

- Improves efficiency in lead handling.

- Helps sales teams focus on potential conversions.

- Enhances revenue and operational productivity.