

X Education Lead Conversion Strategy

Objective: Boosting Lead Conversion to 80%

Challenges:

- High Leads, Low Conversion: Conversion rate at 30%.
- CEO's Target: Achieve an 80% conversion rate.

Data Cleaning:

- Dropped columns with >45% nulls.
- Imputed categorical data strategically.
- Outliers treated, invalid data fixed.
- Grouped low-frequency values.

EDA Insights:

- **Data Imbalance:** Only 38.5% leads converted.
- Lead Origin, Occupation, Source: Impact on conversion.
- **Positive Impact:** Time spent on the website.

Data Preparation:

- Dummy features created for categorical variables.
- Train-Test Split: 70:30 ratio.
- Feature Scaling via Standardization.
- Dropped correlated columns.

Model Building:

- Feature Reduction: RFE and manual process.
- Metric Selection: Balanced accuracy, sensitivity, specificity.
- Cut-off Point: 0.345 for 80% accuracy.

Model Evaluation:

- **Business Dilemma:** CEO's 80% target.
- **Metric Choice:** Sensitivity-Specificity view.
- **Lead Scoring:** Assigned with 0.3 cut-off.

Top 3 Features:

- Total time spent on website.
- Had a Phone Conversation from Last Notable Activity:
- Working Professionals as Current Occupation.

Predictions & Recommendations:

- **Advertising Focus:** Increase budget for Welingak Website.
- **Incentivize Referrals:** Discounts for converting references.
- **Target Audience:** Aggressively target working professionals.

Results:

- **Prediction Metrics:** Around 80% for both train and test.
- **Lead Score Implementation:** Completed successfully.

Conclusion:

- **Strategic Shifts:** Implement recommendations for optimal results.
- **Business Growth:** Anticipate increased conversion with targeted efforts.