

Lead Scoring Case Study – Summary

By

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X Education, a company selling online courses to industry professionals, faces a challenge in converting leads into paying customers. Despite generating a significant number of leads through internet marketing and referrals, the company currently converts only 30% of these leads. To increase the lead conversion rate to 80%, we developed a predictive model to identify and prioritize "Hot Leads."

Using a dataset of 9,000 entries containing various lead details, we followed below mentioned approach:

1. Data Understanding and Cleaning:

- We analyzed the dataset using the 'Leads Data Dictionary' and identified missing values.
- Columns with more than 40% null values were dropped, while other missing values were imputed with appropriate replacements.

2. Exploratory Data Analysis (EDA):

- EDA helped us uncover patterns and relationships within the data, allowing us to select key features for model building.

3. Model Building:

- We developed a Logistic Regression model, achieving the following outcomes:
 - **Train Dataset:** Accuracy: **81.22%**, Sensitivity: **78.63%**, Specificity: **82.81%**.
 - **Test Dataset:** Accuracy: **80.16%**, Sensitivity: **79.82%**, Specificity: **80.38%**.

4. Key Insights:

- The most significant predictors of lead conversion included:
 - **Lead Source: Welingak Website (5.43)**
 - **Lead Source: Reference (2.93)**
 - **Current Occupation: Working Professional (2.68)**

5. Recommendations:

- **Focus on High-Probability Leads:** Allocate dedicated resources to leads originating from the Welingak Website and those obtained via referrals, as these are warm prospects.
- **Prioritize Key Categories:** Target leads with specific characteristics, such as:
 - **Last Activity:** Email Opened (3,540 leads) and Converted to Lead (973 leads).
 - **Current Occupation:** Working Professionals (706 leads).
- **Optimize Sales Team Efficiency:**
 - Focus on high-value leads during peak times to minimize unnecessary calls when quarterly targets are met.
- **Automate Low-Priority Engagement:**
 - Use email, SMS, or chatbots to engage with low-priority segments like unemployed individuals or leads with inactive behaviours.

By implementing these recommendations, X Education can significantly enhance its lead conversion efficiency, ensuring that the sales team focuses their efforts on leads with the highest probability of conversion.