

Lead Scoring Case Study

Submitted By: Pavithra S

Table of Contents

- 01 The Challenge We Face
- 02 Understanding the Objective
- 03 A Systematic Approach
- 04 Deep Dive into EDA
- 05 Identifying Key Factors
- 06 Building the Predictive Model
- 07 Evaluating Model Performance
- 08 Making Data-Driven Predictions
- 09 Key Observations from the Study
- 10 Concluding Insights
- 11 Thank You!

The Challenge We Face

- X Education is experiencing a lead conversion rate of only 30%.
- This means that for every 100 leads, only 30 convert into sales, leaving a significant gap in potential revenue.
- The company aims to improve efficiency by focusing on potential leads, known as Hot Leads.
- The goal is to identify these leads to boost the conversion rate further.
- Let's explore how we can tackle this challenge systematically.

Understanding the Objective

- X Education's primary goal is to develop a model that can assign a lead score between 0 and 100.
- This score will help identify the leads with the highest likelihood of conversion.
- The CEO aspires to increase the conversion rate to 80% by focusing efforts on these Hot Leads.
- This requires a robust model that can adapt to future challenges and optimize resource utilization.
- Our journey begins with understanding the problem and defining our approach.

A Systematic Approach

- The project kicks off with data importation and inspection of the dataset for quality assurance.
- Data preparation follows, ensuring that the dataset is clean and suitable for analysis.
- Next, exploratory data analysis (EDA) reveals key insights and trends within the data.
- Creating dummy variables helps in encoding categorical data for model training.
- This structured approach lays the groundwork for effective model building.

Deep Dive into EDA

- EDA highlights that leads from specific specializations, like HR, Finance, and Marketing, tend to convert more frequently.
- Understanding lead sources reveals that leads generated via Google and direct traffic show higher conversion rates.
- Moreover, analyzing lead origin data shows that most leads land on the submission page.
- Such insights are critical for refining our marketing strategies moving forward.
- The EDA process is instrumental in informing the next steps.

Identifying Key Factors

- Extensive analysis shows that leads engaging with emails tend to have a higher conversion probability.
- Furthermore, sending SMS notifications also enhances lead engagement and conversion chances.
- Last lead activity analysis indicates that the unemployed category is especially keen on pursuing education.
- These factors are essential in shaping our predictive model.
- Recognizing these elements will optimize our targeting efforts.

Building the Predictive Model

- With the insights gained, we can begin modeling using logistic regression techniques.
- RFE (Recursive Feature Elimination) is utilized to isolate the most significant features impacting conversion rates.
- We evaluate the model using metrics such as R-squared, Variance Inflation Factor, and p-values.
- Ensuring stability and accuracy in predictions is fundamental to meet our goal.
- The model must be robust enough to adapt to future changes in lead behavior.

Evaluating Model Performance

- Once the model is built, we perform rigorous evaluations to gauge its effectiveness.
- This includes applying the model to a test set to validate its predictive capabilities.
- Understanding how the model performs helps in making necessary adjustments for accuracy.
- The aim is to achieve a high precision in identifying Hot Leads before deployment.
- Our end goal is clear: a model that reliably predicts successful conversions.

Making Data-Driven Predictions

- The final step involves using the trained model to make informed predictions on new leads.
- By applying the lead score, we can prioritize outreach to those most likely to convert.
- This targeted approach aims to streamline the sales process, enhancing overall efficiency.
- The predictive model becomes a vital asset for the sales team at X Education.
- Data-driven decisions pave the way for increased conversions.

Key Observations from the Study

- The analysis confirms that certain attributes have a strong correlation with lead conversion.
- Understanding lead behavior helps in tailoring marketing strategies to optimize engagement.
- The model suggests focusing on specific lead sources and communication methods.
- Ultimately, these insights will drive the sales team's strategy moving forward.
- Effective prediction leads to better resource allocation and maximized conversions.

Concluding Insights

- By implementing the lead scoring model, X Education has the potential to significantly boost its conversion rates.
- Identifying Hot Leads can streamline efforts and improve sales team efficiency.
- Aiming for an 80% conversion rate is ambitious but achievable with data-driven strategies.
- Continuous monitoring and adaptation of the model will ensure lasting success.
- The power of analytics transforms how we approach sales.

Thank You!

- Thank you for your attention and engagement throughout this presentation!
- We hope this case study sheds light on the immense potential of lead scoring.
- Together, we can revolutionize the approach to lead management and conversion.
- We welcome any questions or discussions on this topic.
- Let's drive success together!