

# Lead Conversion Optimization for X Education

Improving Lead Conversion Efficiency with Data-Driven  
Insights

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## Problem Statement

- X Education is facing a lead conversion rate of 30%. They aim to improve this rate to 80% by focusing on high-potential leads.
- Our objective is to build a predictive model to assign lead scores, prioritizing the most promising leads.



## Approach

- **1. Data Cleaning:** Handled missing values, dropped irrelevant columns, and replaced 'Select' with NaN.
- **2. Data Preprocessing:** Encoded categorical variables and scaled numerical features.
- **3. Model Building:** Used Logistic Regression to assign lead scores based on conversion likelihood.
- **4. Model Evaluation:** Measured accuracy, precision, recall, and AUC-ROC to assess model performance.

A large red speech bubble graphic with a white border, containing the word 'Results' in white text. The bubble has a tail pointing towards the bottom left.

## Results

- The model achieved the following performance metrics:
  - - Accuracy: 82.04%
  - - Precision: 80.30%
  - - Recall: 71.44%
  - - ROC-AUC: 90.16%
- These metrics indicate that the model is effective at identifying hot leads and can improve sales efficiency.



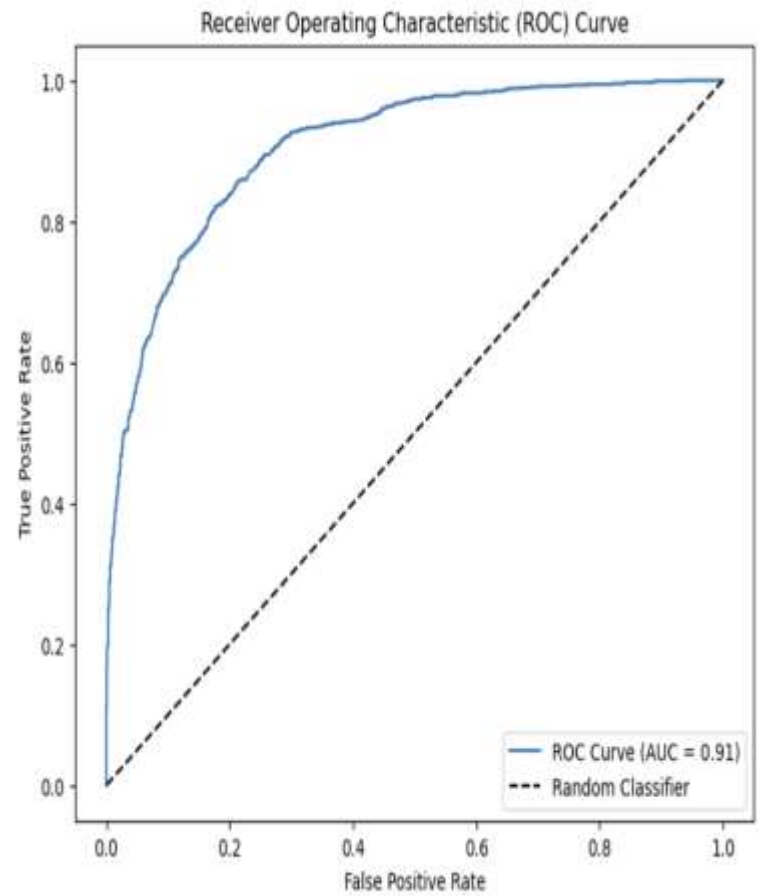
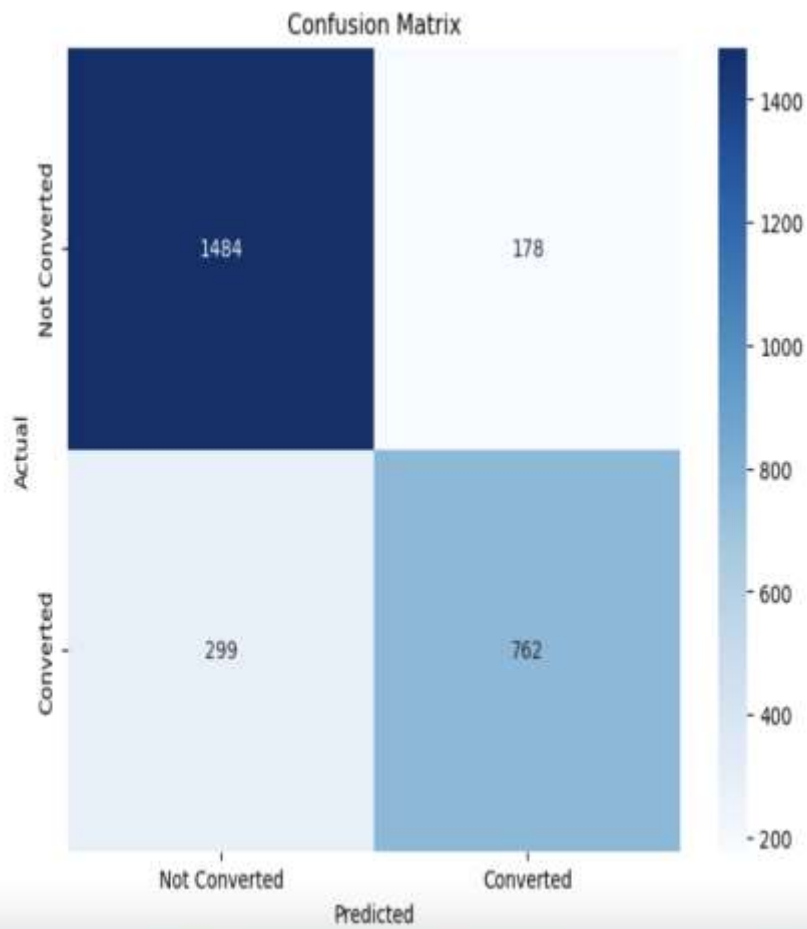
## Business Impact

- By focusing on leads with higher scores, X Education can:
  - - Improve their conversion rate, reaching closer to their 80% target.
  - - Optimize sales team efforts by prioritizing high-potential leads.
  - - Reduce wasted time on cold leads, increasing overall sales efficiency.



## Visualizations and Insights

- Key insights from the data include:
  - - Leads with higher engagement (total visits, time spent) have a higher conversion rate.
  - - Past behavior and referral source play a crucial role in lead conversion probability.
  - Graphs and visuals help understand the distribution of key features.





Thank you