



LEAD SCORE CASE STUDY

SUBMITTED BY:

Somya Gupta
Jayanth Vemula
Sruthi Kavuluru

Lead Score Case Study for X Education

- **Problem Statement :**

- X Education sells online courses to industry professionals. The company markets its courses on several websites and search engines like Google.
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- Once these people land on the website, they might browse the courses or fill up a form for the course or watch some videos. When these people fill up a form providing their email address or phone number, they are classified to be a lead. Moreover, the company also gets leads through past referrals.
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- Once these leads are acquired, employees from the sales team start making calls, writing emails, etc. Through this process, some of the leads get converted while most do not. The typical lead conversion rate at X education is around 30%.
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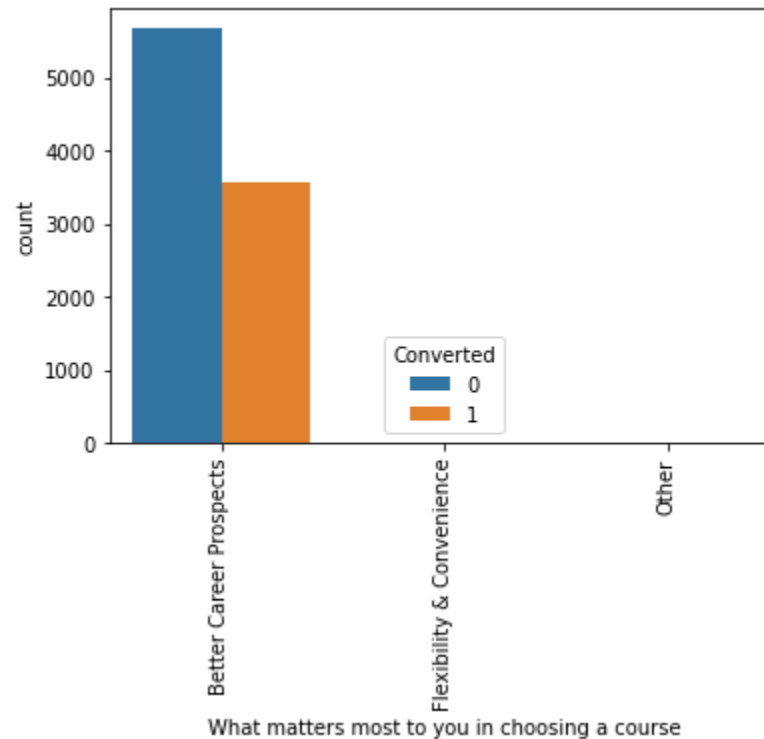
- **Business Goal:**

- X Education needs help in selecting the most promising leads, i.e. the leads that are most likely to convert into paying customers.
- The company needs a model wherein you a lead score is assigned to each of the leads such that the customers with higher lead score have a higher conversion chance and the customers with lower lead score have a lower conversion chance.
- The CEO, in particular, has given a ballpark of the target lead conversion rate to be around 80%.

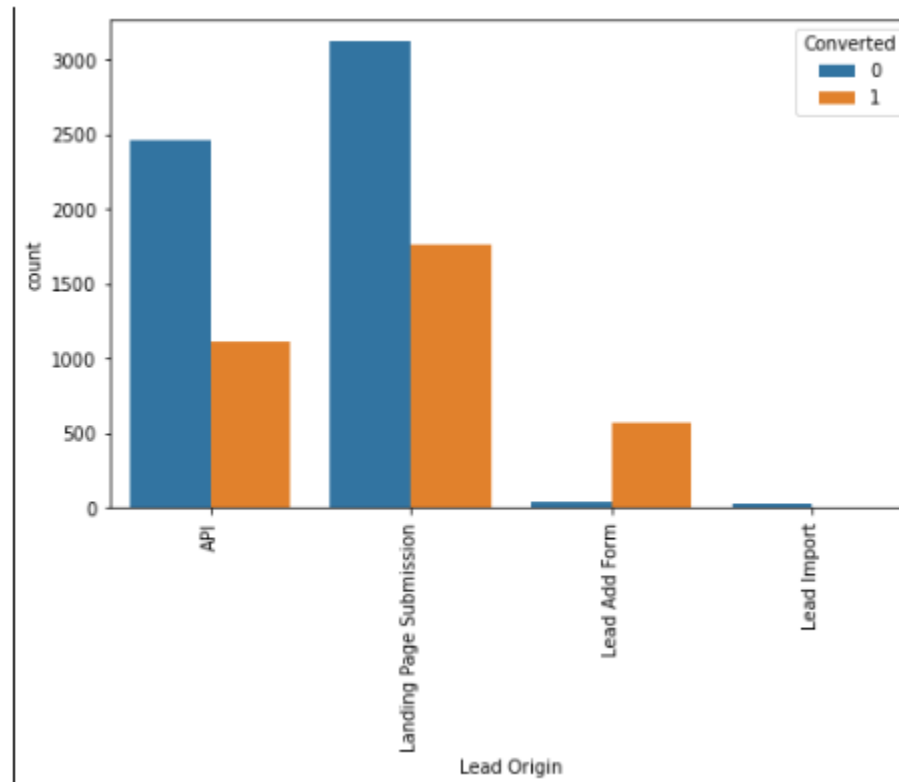
STRATEGY

- Source the data for analysis
- Clean and prepare the data
- Exploratory Data Analysis.
- Feature Scaling
- Splitting the data into Test and Train dataset.
- Building a logistic Regression model and calculate Lead Score.
- Evaluating the model by using different metrics - Specificity and Sensitivity or Precision and Recall.
- Applying the best model in Test data based on the Sensitivity and Specificity Metrics.

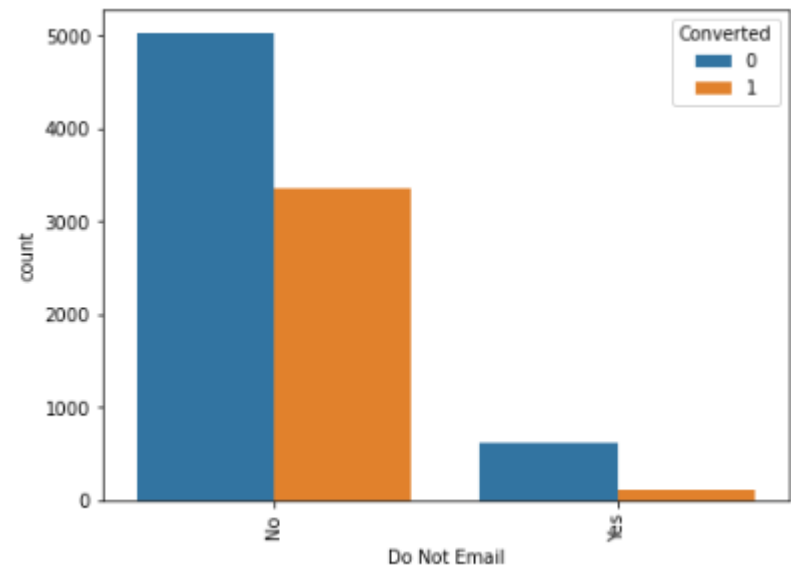
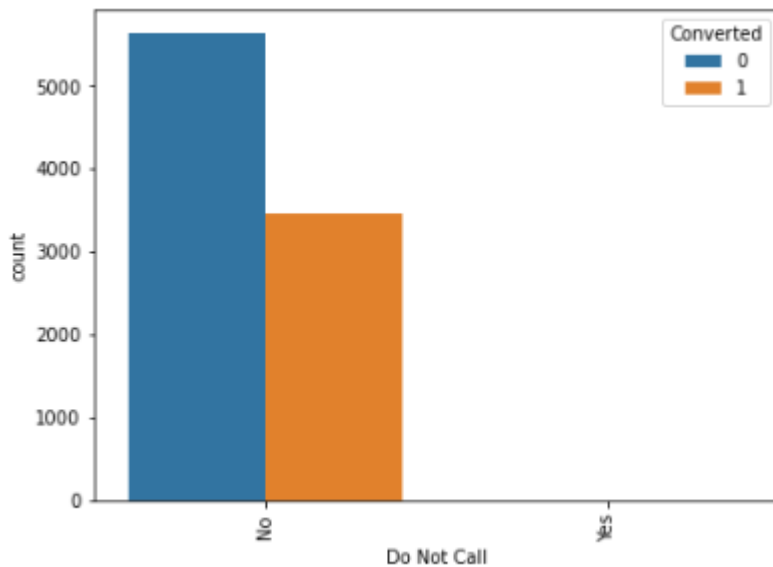
We have around 39% Conversion rate in Total



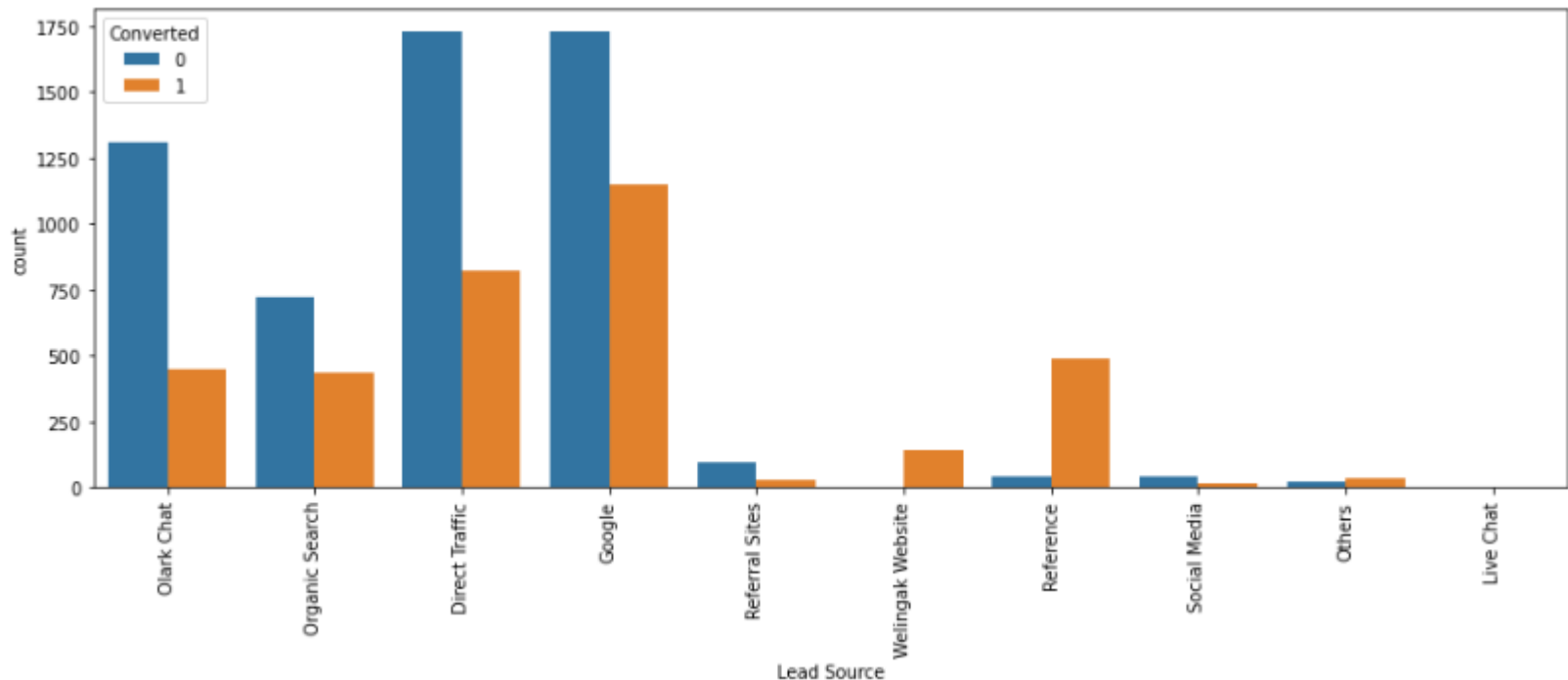
IN Lead Origin, Maximum Conversation Happened From Landing Page Submission



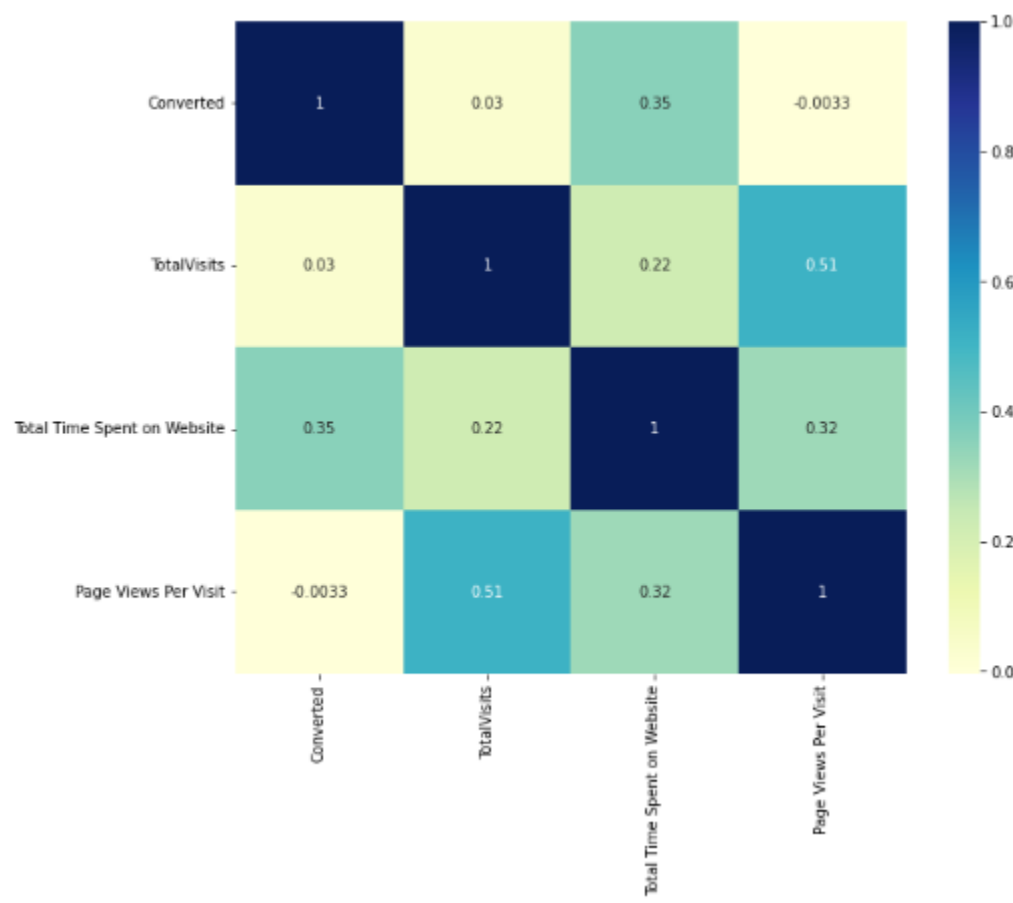
Major Conversion Has Happened From Emails Sent And Calls Made



Major Conversion In The Lead Source Is From Google



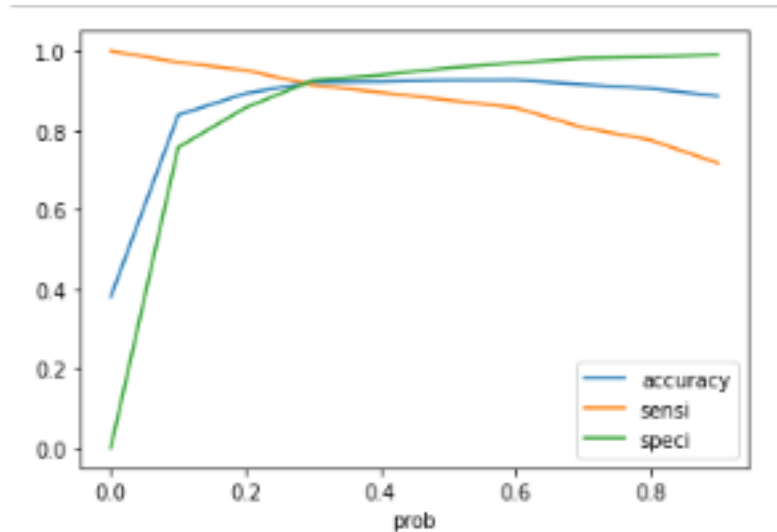
HEATMAP



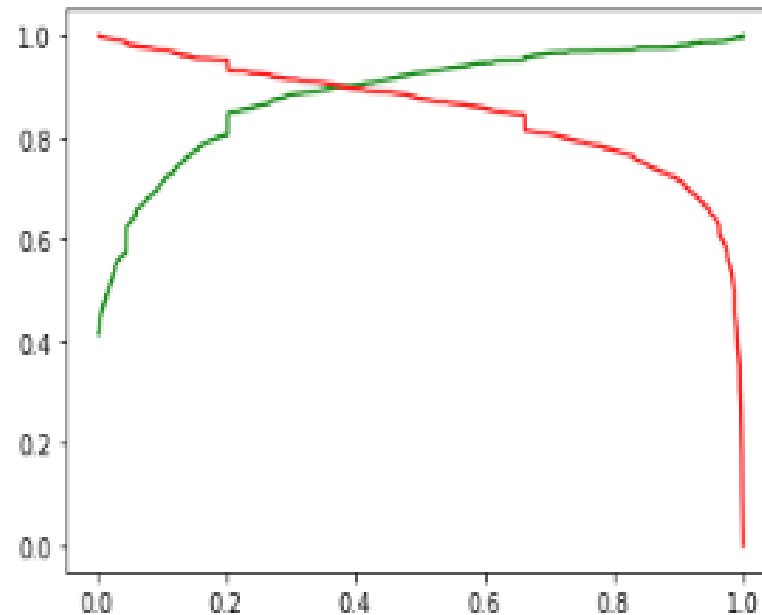
Variables Impacting the Conversion Rate

- Do Not Email
- Total Visits
- Total Time Spent On Website
- Lead Origin – Lead Page Submission
- Lead Origin – Lead Add Form
- Lead Source - Olark Chat
- Last Source – Welingak Website
- Last Activity – Email Bounced
- Last Activity – Not Sure
- Last Activity – Olark Chat Conversation
- Last Activity – SMS Sent
- Current Occupation – No Information
- Current Occupation – Working Professional
- Last Notable Activity – Had a Phone Conversation
- Last Notable Activity - Unreachable

The Graph Depicts An Optimal Cut Off Of 0.35 Based On Accuracy, Sensitivity, Specificity



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Final Observation Of Text Data And Train Data

- **Observation:**
- After running the model on the Test Data these are the figures we obtain:
- Accuracy : 92.78%
- Sensitivity : 91.98%
- Specificity : 93.26%
- **Final Observation:**
- Let us compare the values obtained for Train & Test:
- **Train Data:**
- Accuracy : 92.29%
- Sensitivity : 91.70%
- Specificity : 92.66%
- **Test Data:**
- Accuracy : 92.78%
- Sensitivity : 91.98%
- Specificity : 93.26%
- The Model seems to predict the Conversion Rate very well and we should be able to give the CEO confidence in making good calls based on this model