# Case Study X Education Lead Conversion

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#### Problem Statement

X Education selling online courses to industry professionals.

- Professionals interested and browsing the course land on the website and browse for course, such users are classified as potential leads to take the course.
- Identify the most potential leads i.e., 'Hot Leads'.
- With the identified Hot Leads, the Sales team will focus more on communicating with them rather than making calls to everyone.



## Analysis Approach

- Identify the attributes affecting the conversion of leads.
- Calculate the score from 0 to 100 for each lead.
- The high score leads are the most potential leads i.e., "Hot leads"
- For hot leads, the conversion rate should be up as the sales team will focus more on these leads.



## Conversion of leads affected by



Occupation



Lead Origin



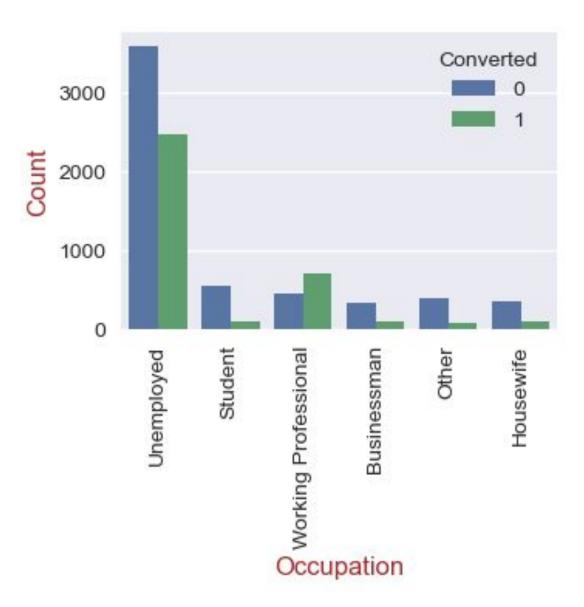
**Last Activity** 



Total time spent on Website

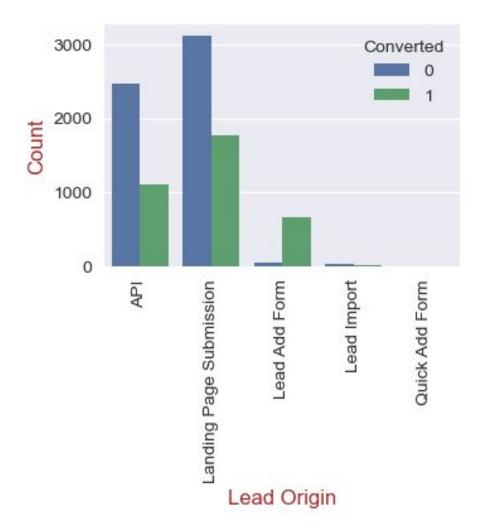
## OCCUPATION

The working professionals are more interested in the course and opting for it.



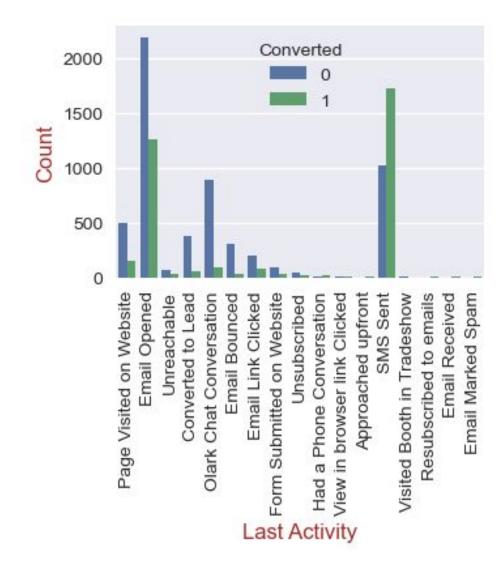
#### **LEAD ORIGIN**

The customers who are filling the lead add form show higher conversion rate.



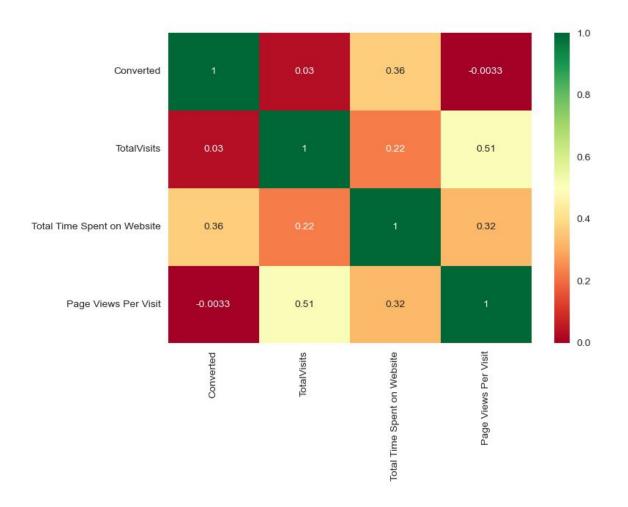
### LAST ACTIVITY

The conversion rate is higher for the customers to whom the "SMS Sent".



#### TIME SPENT

Customers visiting the site more often and spending more time on website have higher chances of getting converted.



## MODEL PERFORMANCE

ROC - Receiver operating characteristics curve shown here, to show the performance of model created for training data prediction.

• Accuracy: 80.50

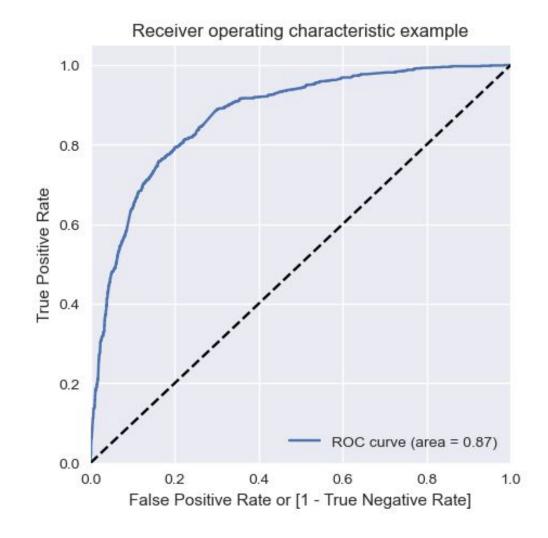
• Sensitivity: 68.00

• Specificity: 88.205

False Positive Rate: 11.79

Precision: 78.03

Random threshold as 0.05.



# Tune Threshold

#### 0.38 is the cutoff probability

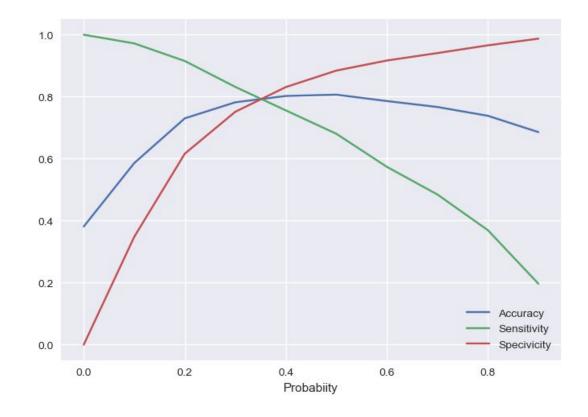
• Accuracy: 80.24

• Sensitivity: 78.02

• Specificity: 81.60

• False Positive Rate: 18.39

• Precision: 72.33



# Tune Threshold

#### **Precision Recall**

0.41 is the new threshold

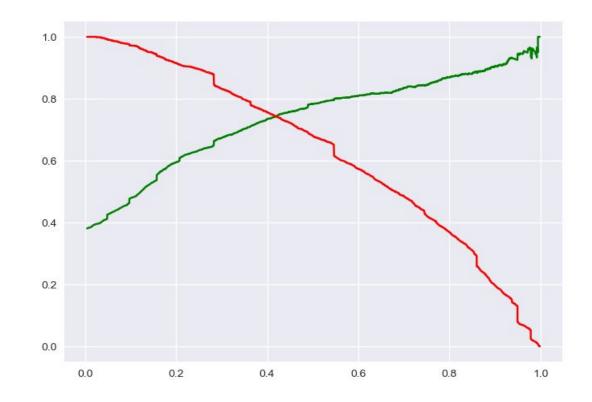
• Accuracy: 80.58

• Sensitivity: 75.70

• Specificity: 83.58

• False Positive Rate: 16.41

• Precision: 73.96



## Optimal Threshold

Sensitivity and Specificity is more for cutoff 0.38, hence the final threshold should be 0.38.



## PERFORMANCE ON TEST SET

ROC - Receiver operating characteristics curve shown here, to show the performance of model created for test data prediction.

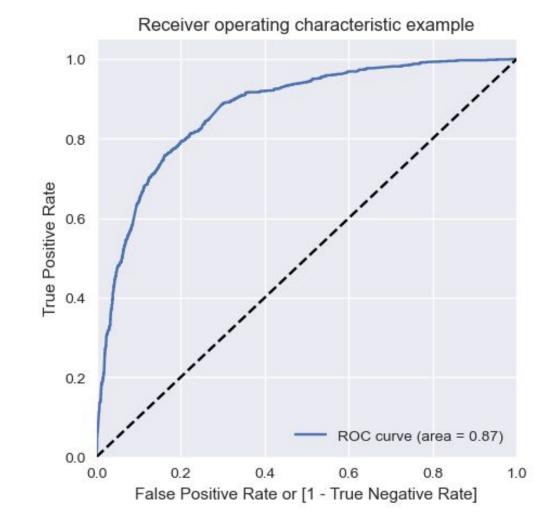
• Accuracy: 80.12

• Sensitivity: 76.71

• Specificity: 82.34

False Positive Rate: 17.65

• Precision: 73.94



## Recommendation



PRIORITIZE THE FEATURES WITH HIGH SCORE VALUE



TARGET THE WORKING PROFESSIONALS



FOLLOW UP THE INTERESTED USERS WITH SMS.



CUSTOMERS ADDING FORM ARE GOOD TO TARGET.

# Thank You

