

LEAD SCORE CASE STUDY

PREPARED BY:
CHINMAYA PRASAD
KAJAL VIDHATE
C HEMANTH GOPAL

CONTENTS

- Problem Statement
- Approach followed
- Exploratory Data Analysis
- Finding Correlations
- Model Building
- Model Evaluation
- Observations
- Conclusion

PROBLEM STATEMENT

- An education company named X Education sells online courses to industry professionals. On any given day, many professionals who are interested in the courses land on their website and browse for courses. They have process of form filling on their website after which the company that individual as a lead.
- 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 of them do not.
- The typical lead conversion rate at X education is around 30%. Now, this means if, say, they acquire 100 leads in a day, only about 30 of them are converted. To make this process more efficient, the company wishes to identify the most potential leads, also known as Hot Leads.
- If they successfully identify this set of leads, the lead conversion rate should go up as the sales team will now be focusing more on communicating with the potential leads rather than making calls to everyone

OBJECTIVE

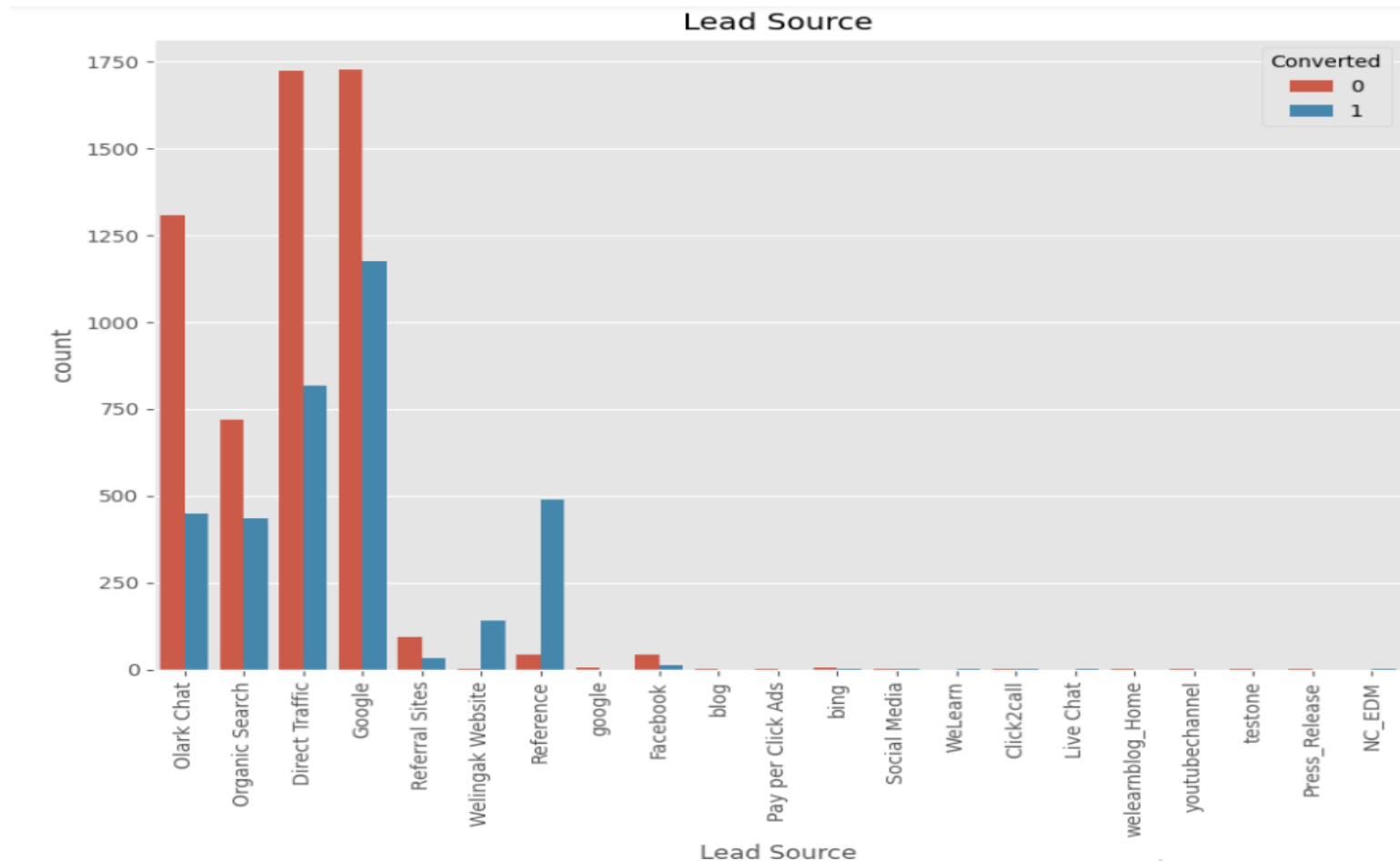
- Lead X wants us to build a model to give every lead a lead score between 0 -100 . So that they can identify the Hot leads and increase their conversion rate as well.
- The CEO want to achieve a lead conversion rate of 80%.
- They want the model to be able to handle future constraints as well like Peak time actions required, how to utilize full manpower and after achieving target what should be the approaches

APPROACH FOLLOWED

- Importing data
- Data preparation
- Exploratory Data Analysis
- Test-Train Split
- Feature Scaling using Standard Scaler and Correlations
- Model Rebuilding(VIF, REF, P Value)
- Model Evaluation
- Conclusion

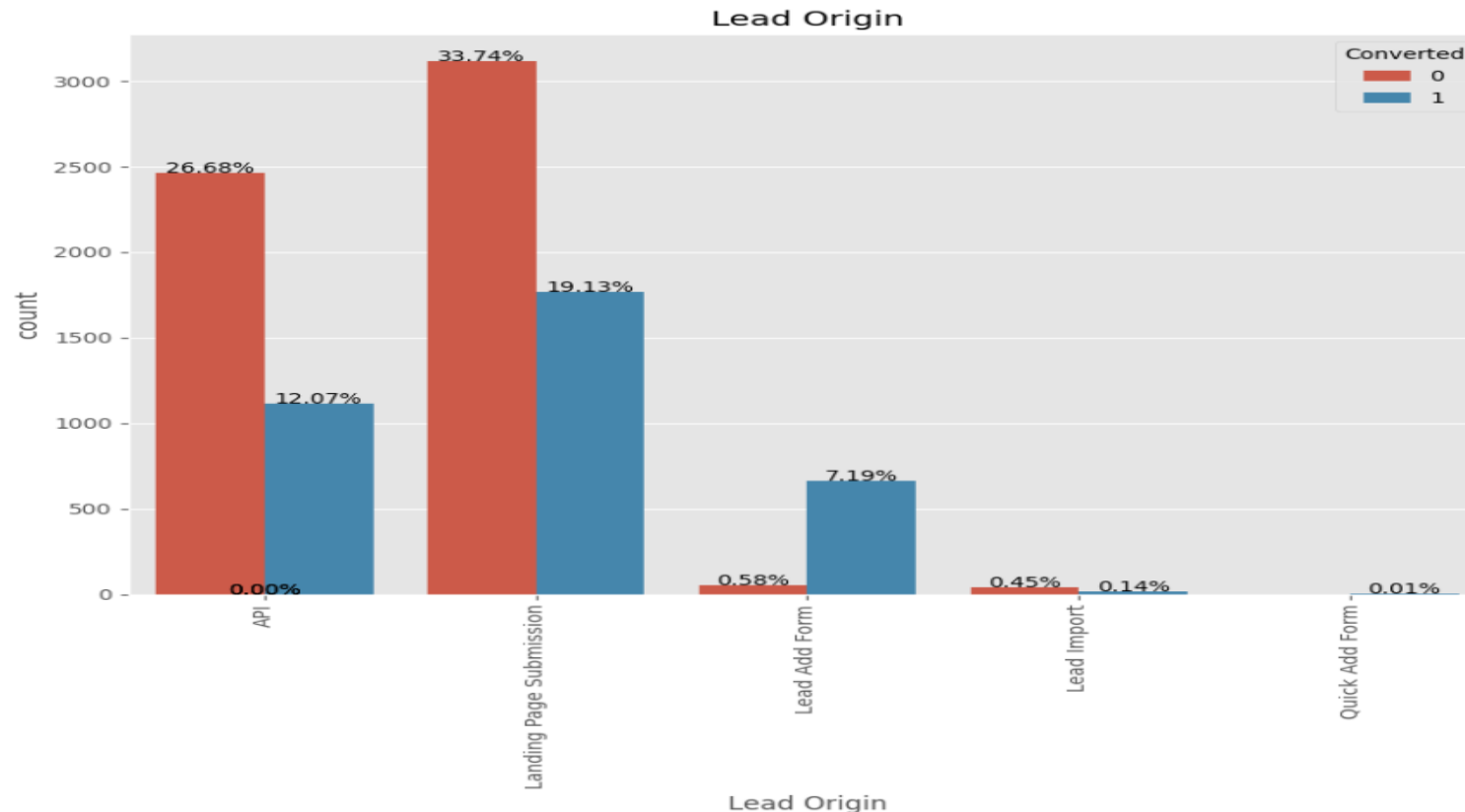
EDA: LEAD SOURCE

- Google, Direct Traffic and Olark Chat are the top 3 Lead Source.
- The conversion rate for Welingak Website and Reference are higher.
- Organic Search and Google has balanced Conversion rate.



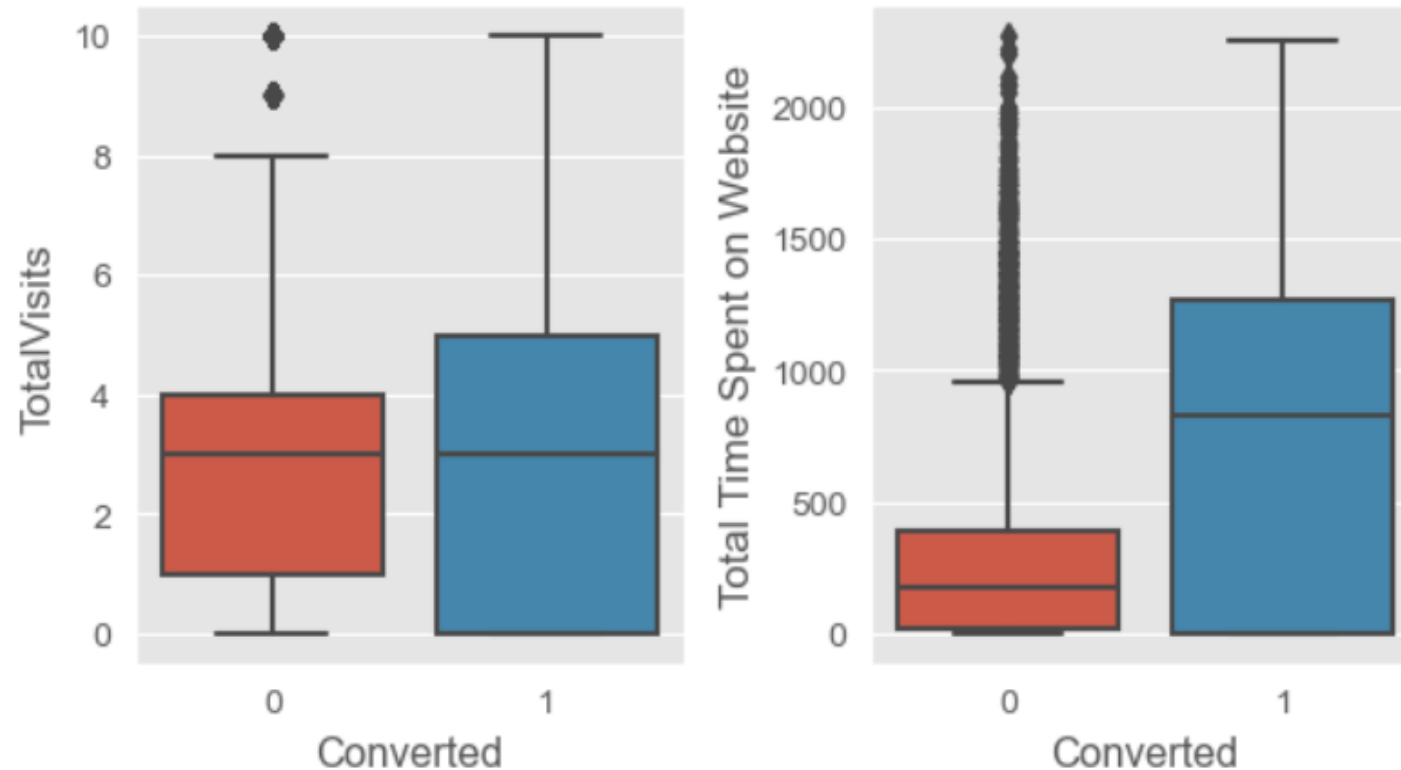
EDA: LEAD ORIGIN

- API and Landing Page Submission has lesser conversion (app.35%). However, the origin has significant leads count.
- Lead Import and Quick Add Form has negligible leads and very less conversion rate. Hence, can be ignored
- Lead Add Form seems to have good conversion rate even though having lesser lead count.



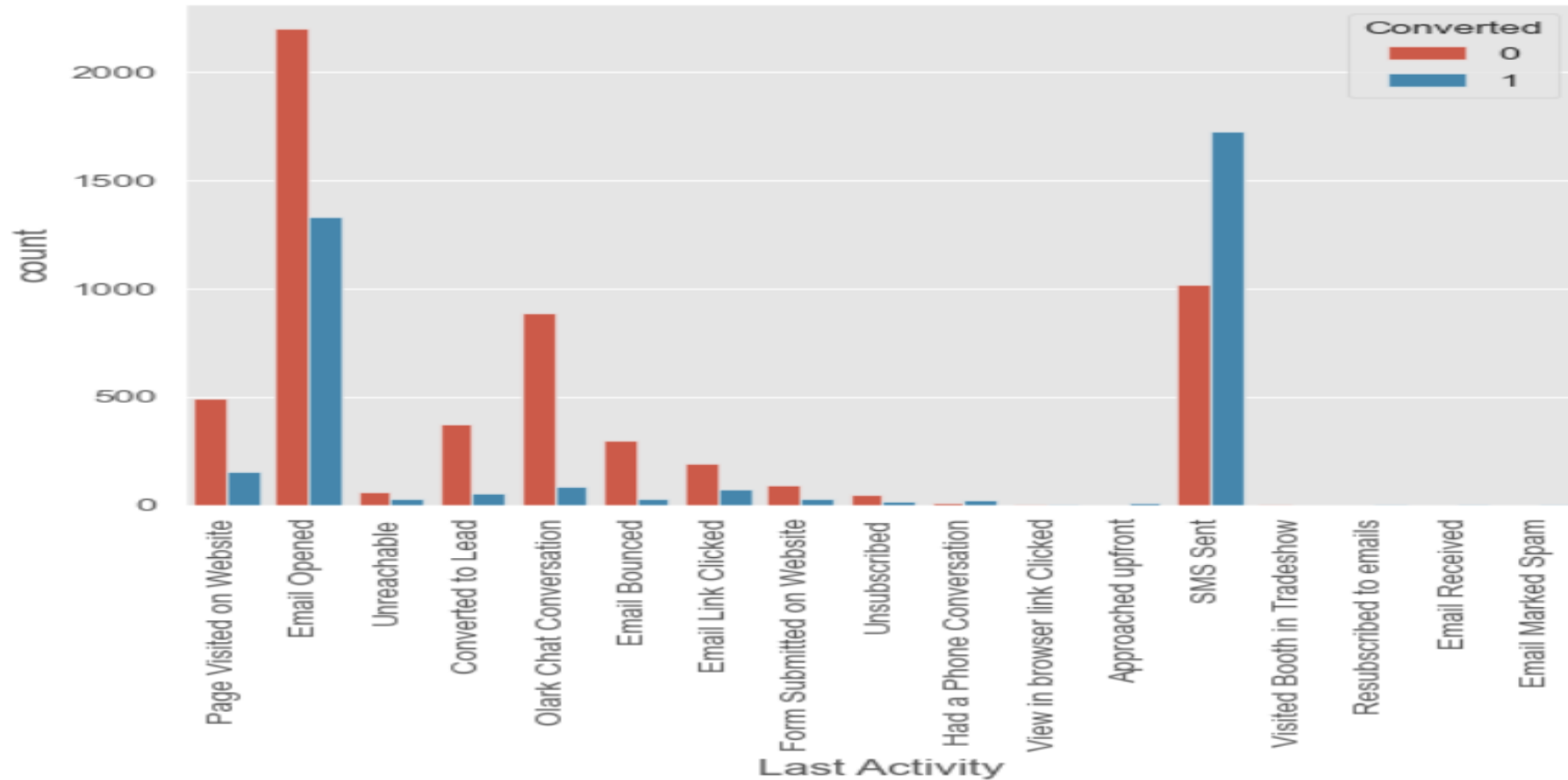
EDA: TOTAL VISITS AND TIME SPENT

- Users spending more time on website are more likely to get converted.
- Total Visits variables are not much conclusive as the median is that similar scale.



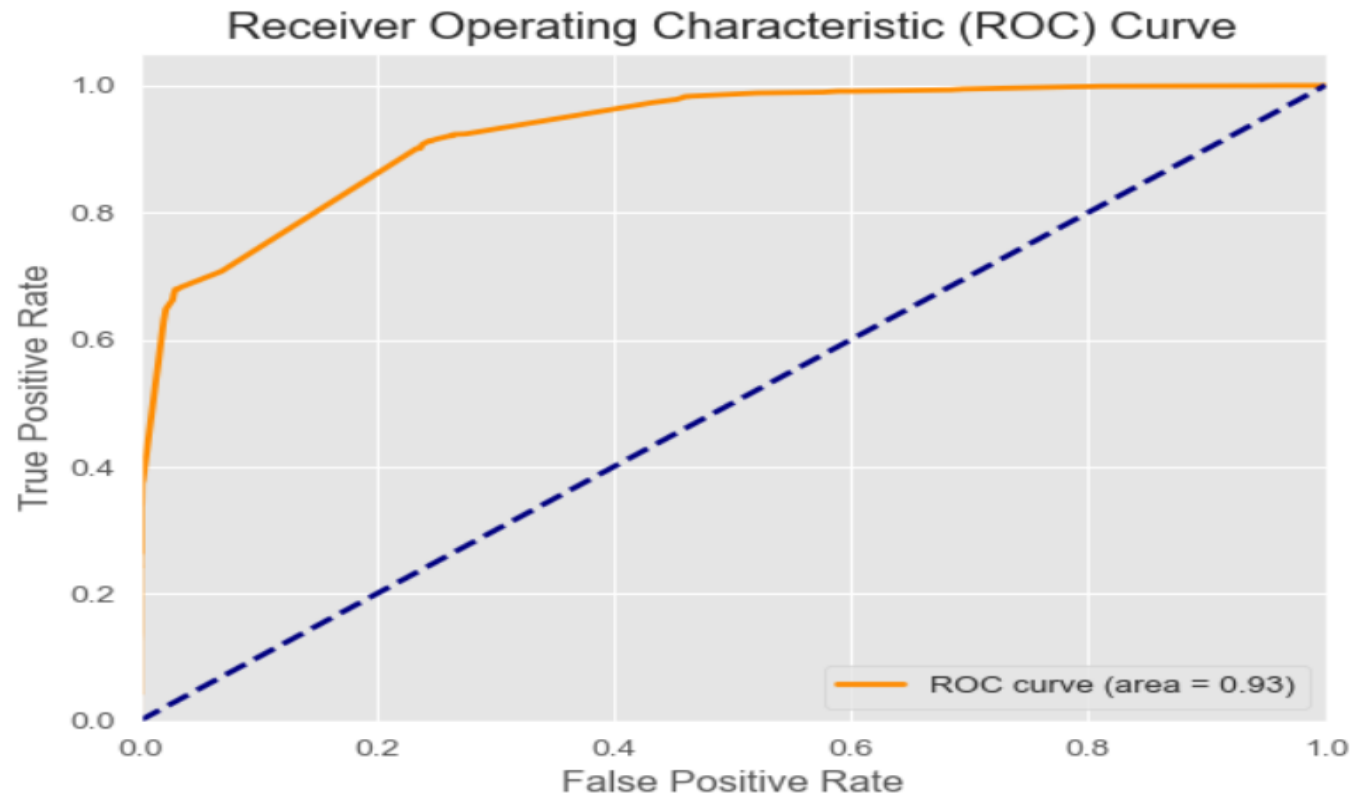
EDA: LAST LEAD ACTIVITY

- "Email Opened" is the highest count of last activity.
- 'SMS Sent' has higher conversion rate.



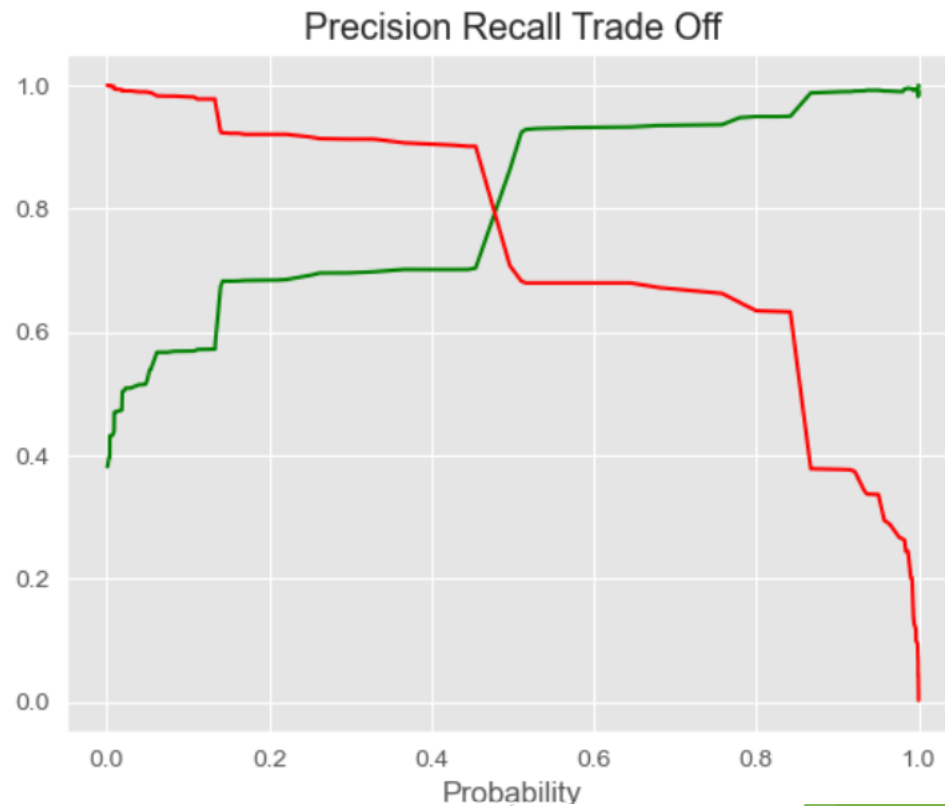
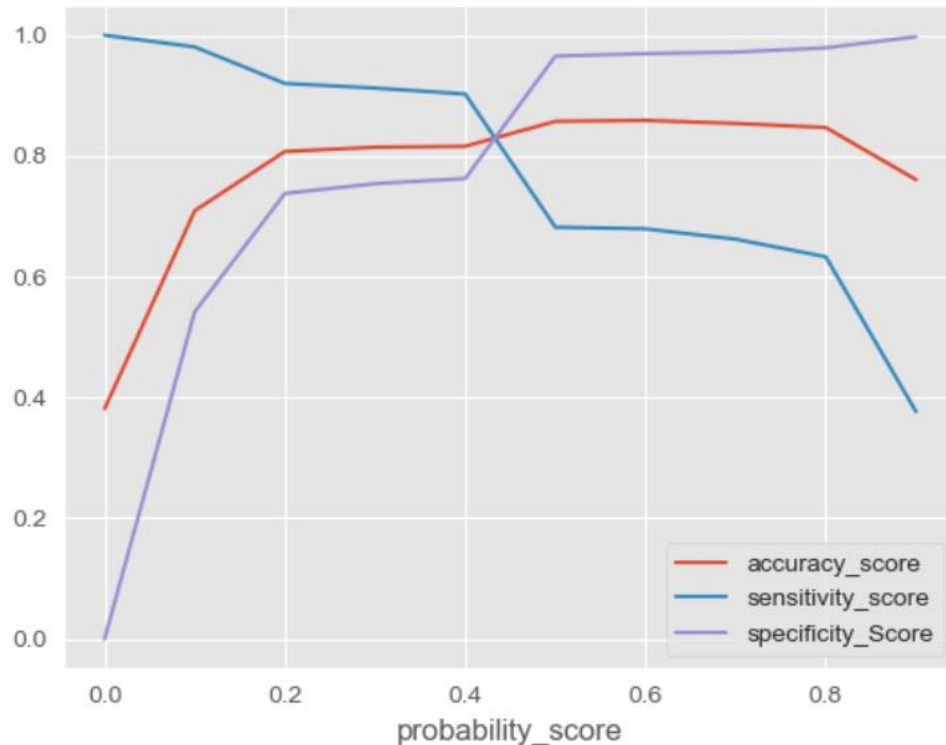
MODEL EVALUATION

➤ ROC Curve



MODEL EVALUATION

- In the plot for accuracy_score, sensitivity_score, specificity_score, we got 0.42 as Optimal score.
- In Precision Recall curve we got 0.47 as Optimal cutoff.
- We will take 0.42 as the optimal cutoff point as the probability score to assign Lead Score in training data.



OBSERVATIONS

Train Data:

- Accuracy : 80%
- Sensitivity : 77%
- Specificity : 80%

Test Data:

- Accuracy : 80%
- Sensitivity : 77%
- Specificity : 80%

Final Feature List:

- Lead Source_Olark Chat
- Specialization_Others
- Lead Origin_Lead Add Form
- Lead Source_Welingak Website
- Total Time Spent on Website
- Lead Origin_Landing Page Submission
- What is your current occupation_Working Professionals
- Do Not Email

CONCLUSIONS

- To improve the lead conversion rate, we need to focus on increasing the conversion rate of 'API' and Landing Page Submission then also increasing the number of leads from 'Lead Add Form'.
- To improve the lead conversion rate, we should focus on increasing the conversion rate of 'Google', 'Olark Chat', 'Organic Search', 'Direct Traffic' and increasing the number of leads from 'Reference' and 'Welingnak Website'.
- Website pages can be made more dynamic and higher user experience so as to capture the time of the users on Websites for longer.
- We should concentrate on increasing the conversion rate of those having last activity as Email Opened by making a call to those leads and try to increase the count of the ones having last activity as SMS sent.
- To improvise the conversion rate, we should increase the Working Professional leads. Newer strategies to be thought to reach out to Working Professionals.

THANK YOU!!