Lead Score Case Study

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What it Contains?

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➤ Goal of Case Study

➤ Problem Approach

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➤ Correlations

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➤ Conclusion

Problem Statement

An X Education need help to select the most promising leads, i.e. the leads that are most likely to convert into paying customers.

The company requires us to build a model wherein you need to assign a lead score 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%.

Goal of Case Study

Build a logistic regression model to assign a lead score between 0 and 100 to each of the leads which can be used by the company to target potential leads.

A higher score would mean that the lead is hot, i.e. is most likely to convert whereas a lower score would mean that the lead is cold and will mostly not get converted.
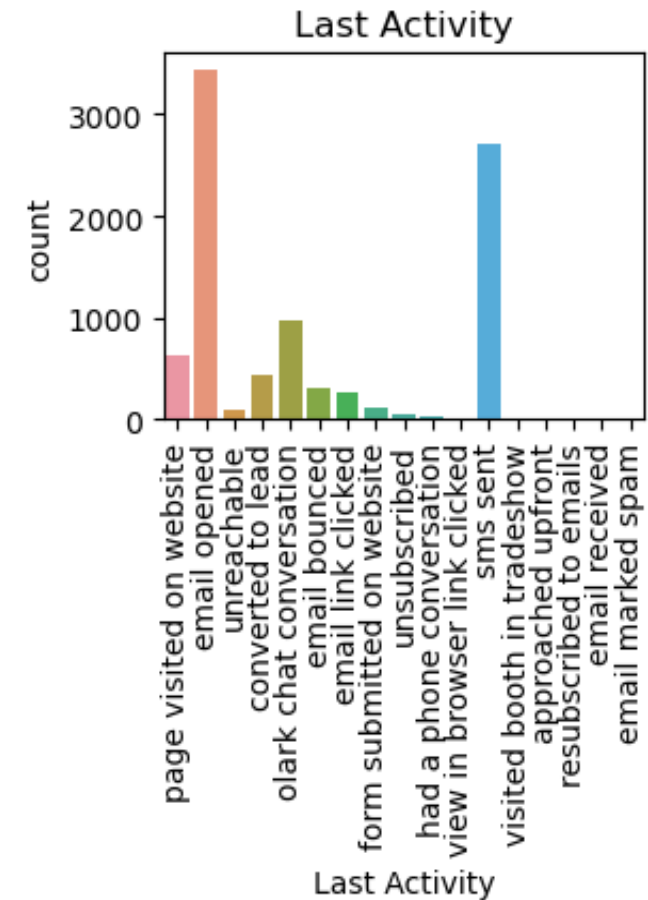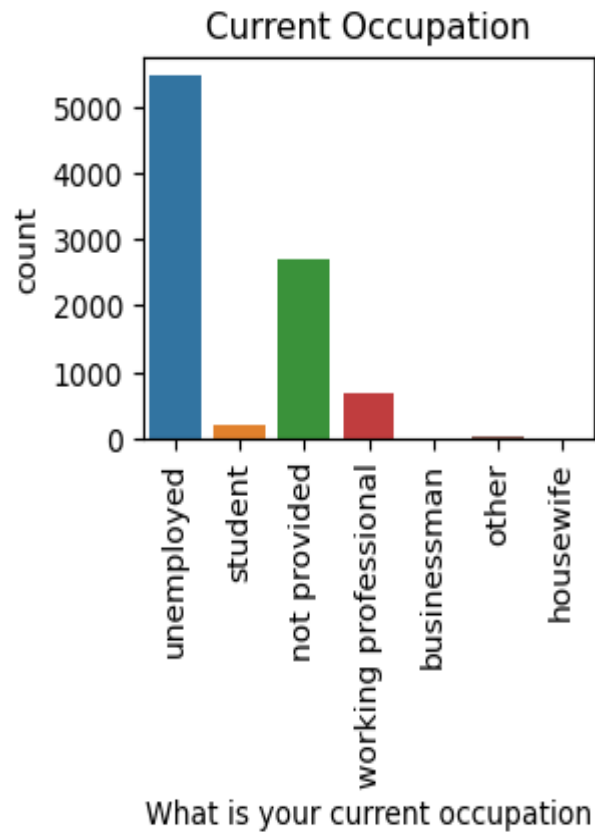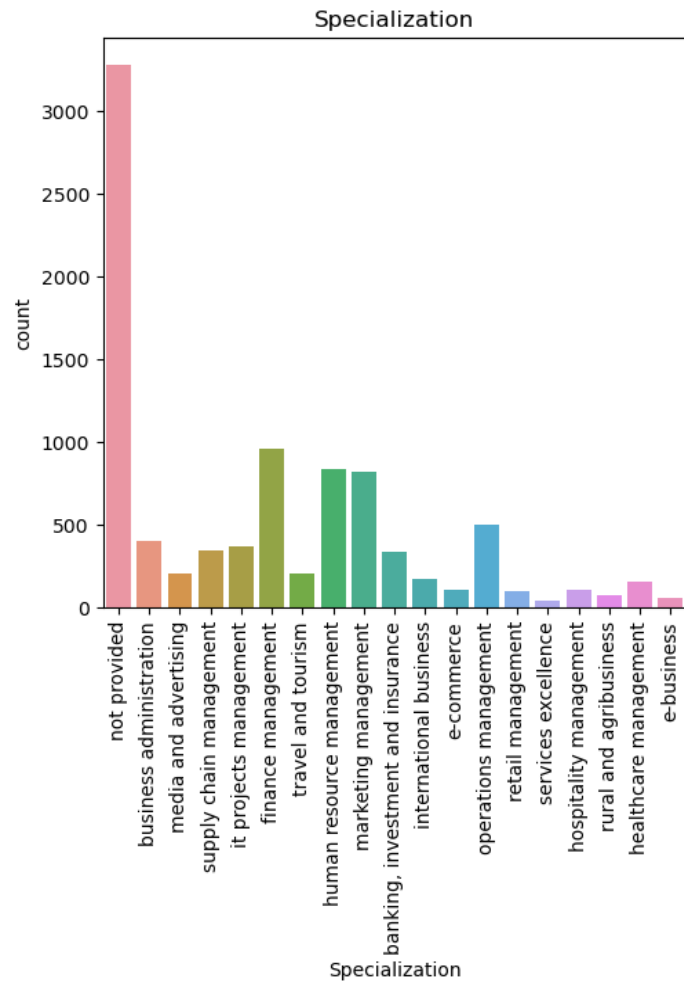
Problem Approach

- Importing Data
- Inspecting Dataframe
- Data Preparation and Cleaning
- EDA
- Dummy variable creation
- Train-Test split
- Feature scaling
- Correlations
- Model Building(RFE squared, VIF and p-values)
- Model Evaluation
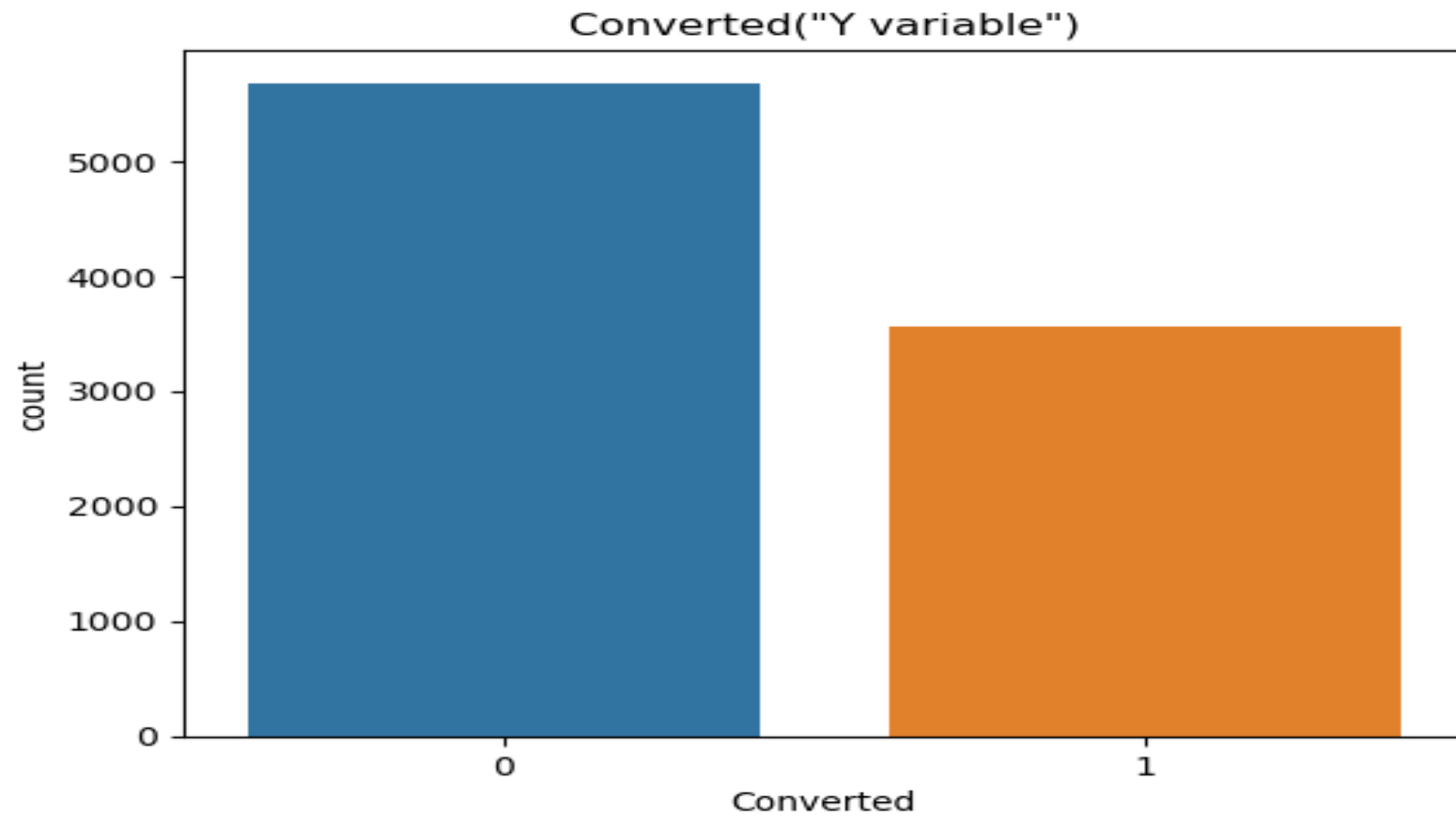- Making Prediction on test set
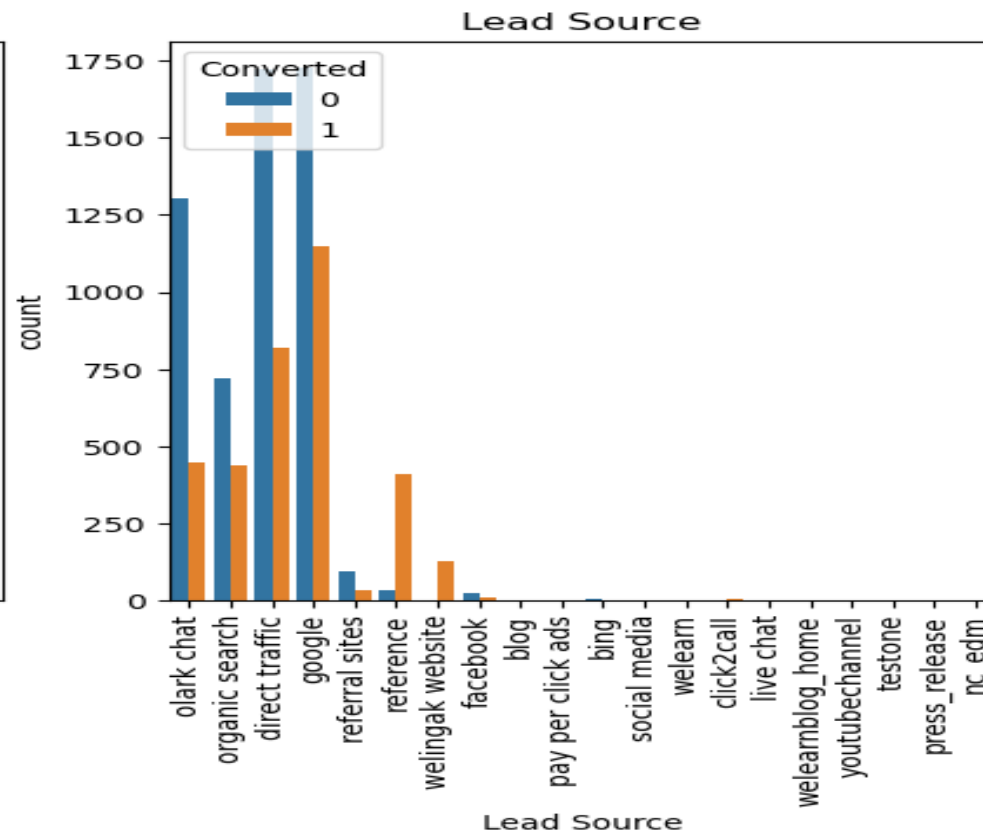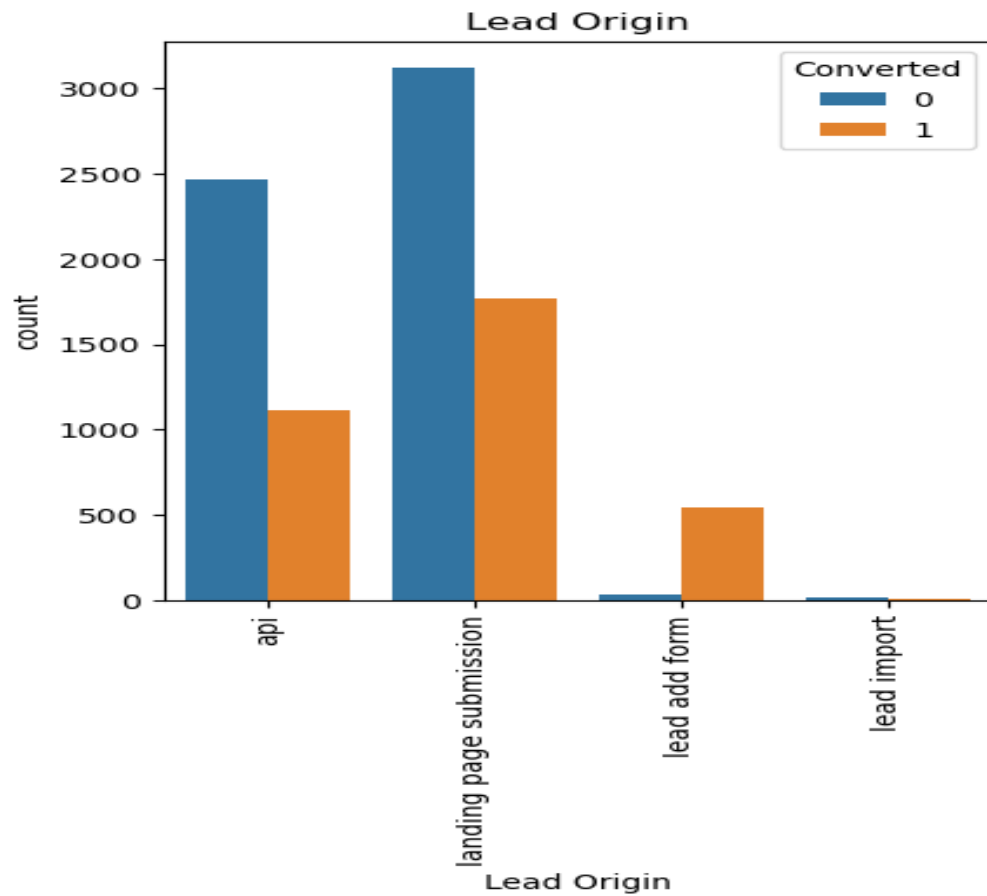
Checking the Lead score count
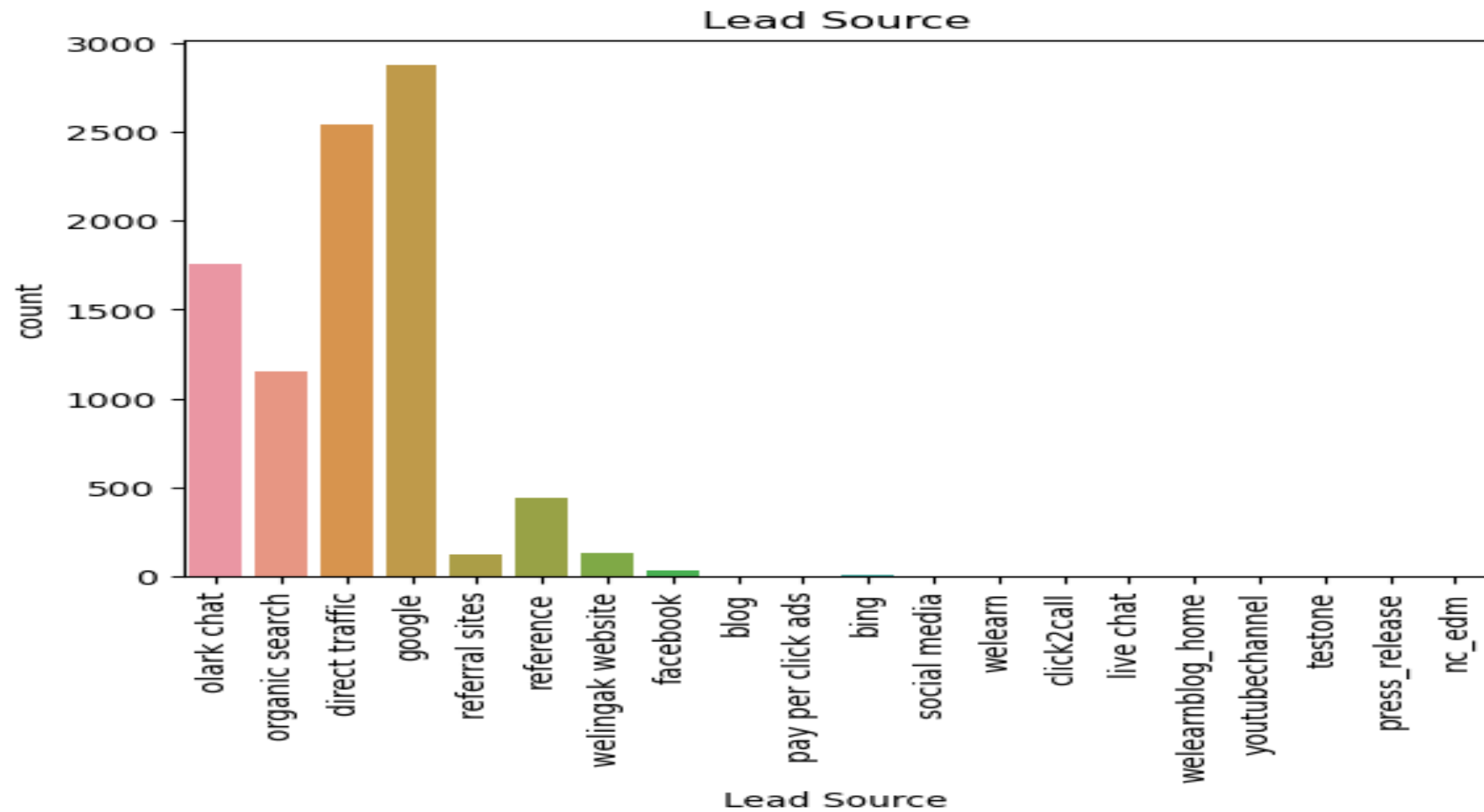
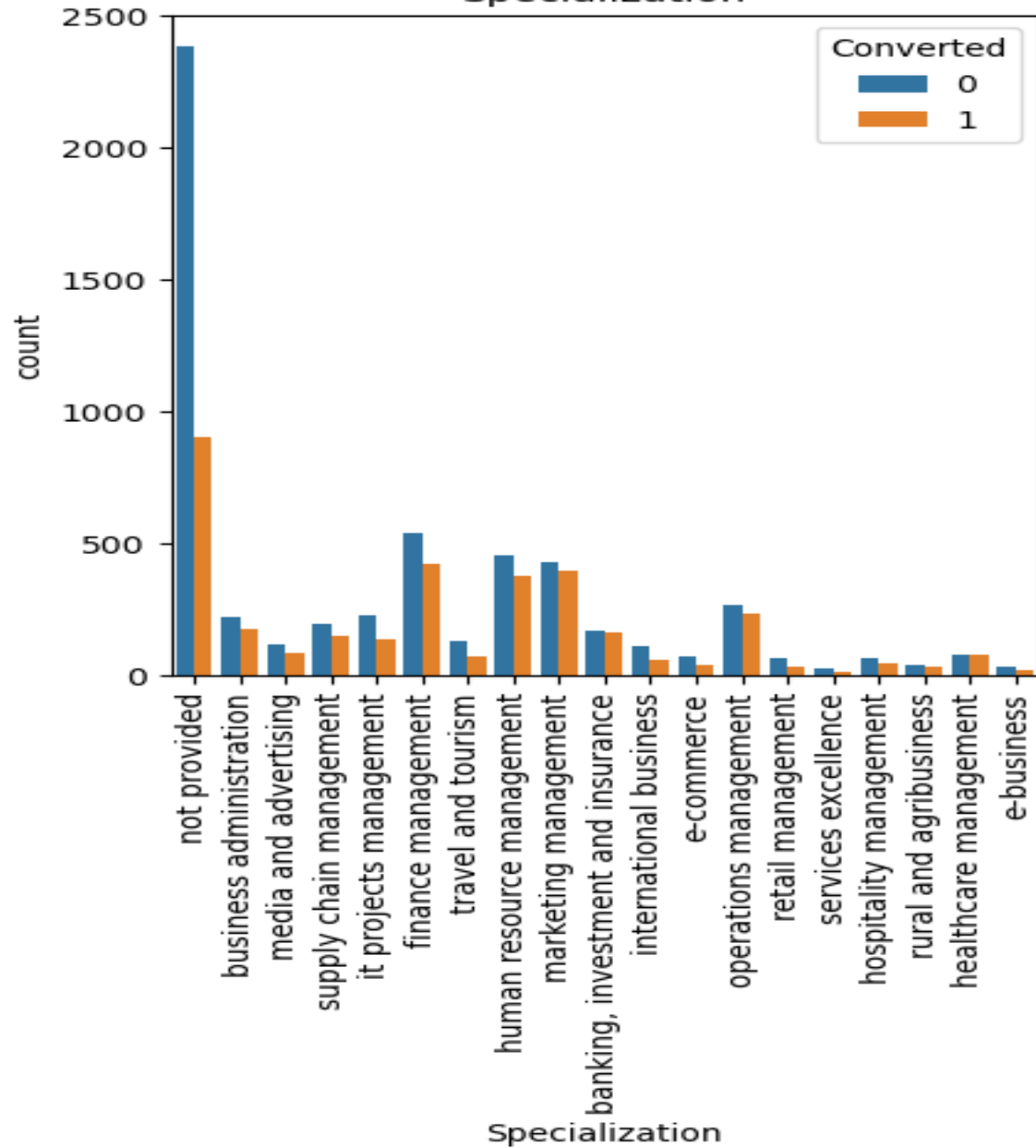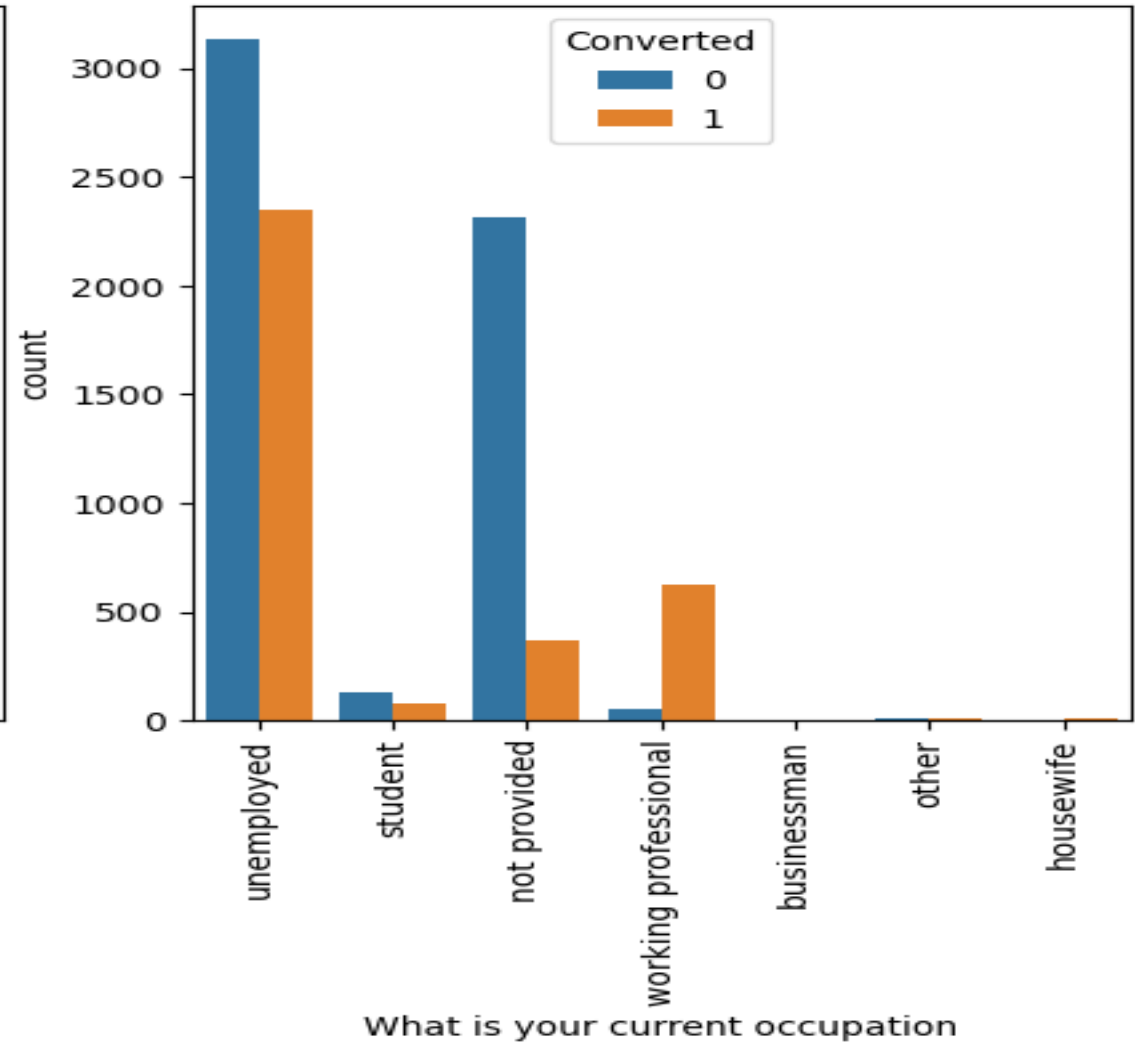# Checking count of few more columns

Conversion Count Plot
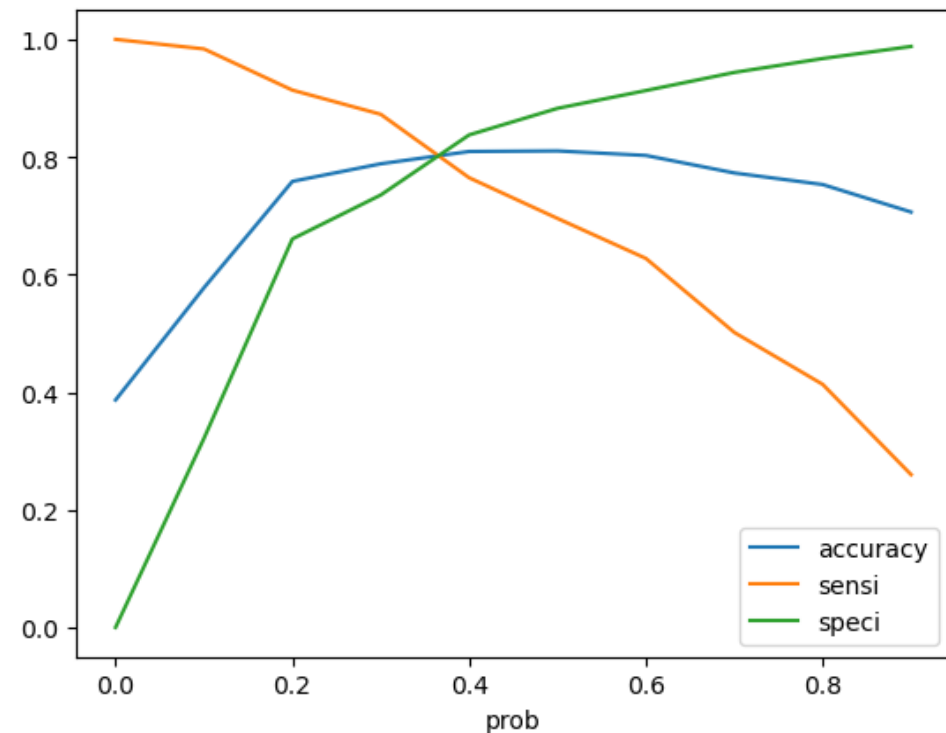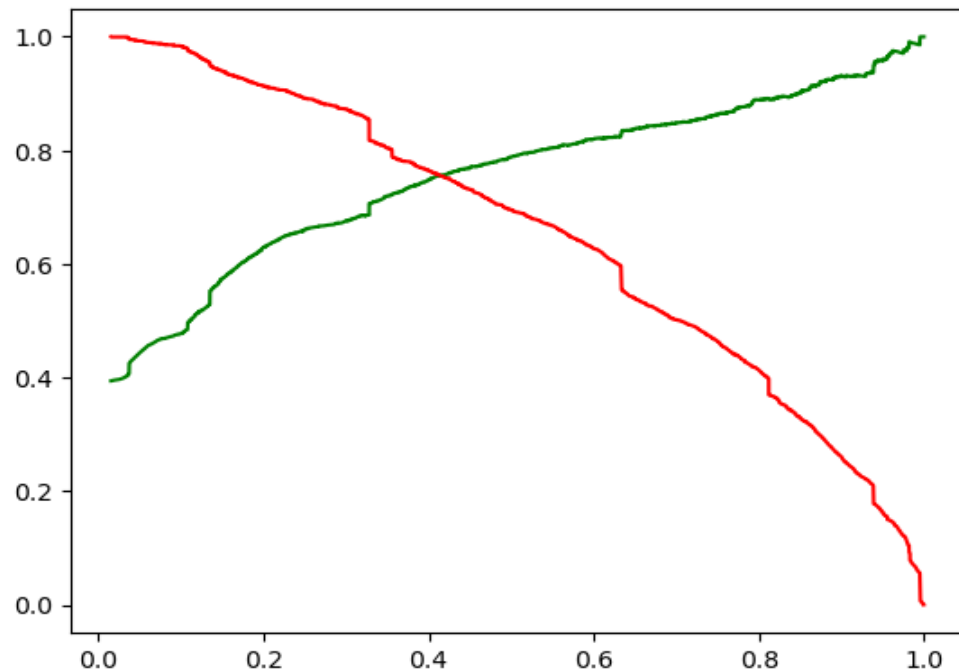
Relating Categorical columns to Converted

Correlation Plot
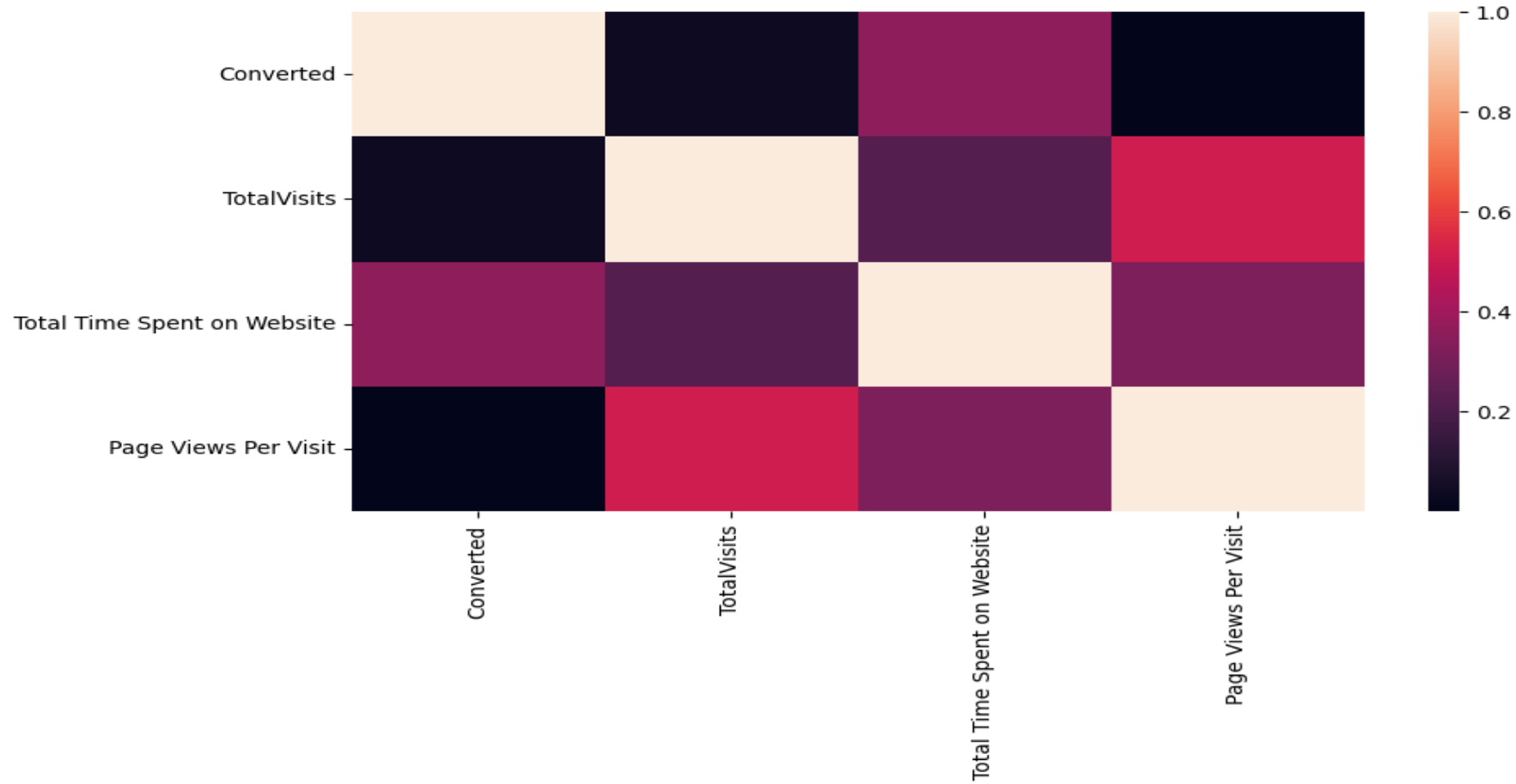
Model Evaluation

ROC curve : 0.41 is the tradeoff b/w precision and recall. So, we can consider any prospect lead with conversion probability higher than 41% to be a hot lead

Conclusion

It is found that the variables that mattered the most in the potential buyers are (In descending order) :

1. The total time spend on the Website.

2. Total number of visits.

3. When the lead source was: Google, Direct traffic, Organic search, Welingak website

4. When the last activity was: SMS, Olark chat conversation

5. When their current occupation is as a working professional.

The X Education can flourish as they have a very high chance to get almost all the potential buyers to change their mind and buy their courses.