

# Lead Score Logistic Regression

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# Business Problem & Approach

## Business Problem:

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

X Education offers online courses for industry professionals. Despite receiving numerous leads, their conversion rate is quite low. (30%).

To make this process more efficient, the company wishes to identify the most potential leads, also known as 'Hot Leads'

## Approach:

**Lead Data:** files has been provided with leads information containing approximately 9,000 data points

Perform Data Cleaning and EDA

Develop a model to identify leads with a conversion probability greater than 80%

# Detailed Approach

Import data & Perform data checks

EDA

Dummy Variable creation

Test- Train Split

Feature scaling

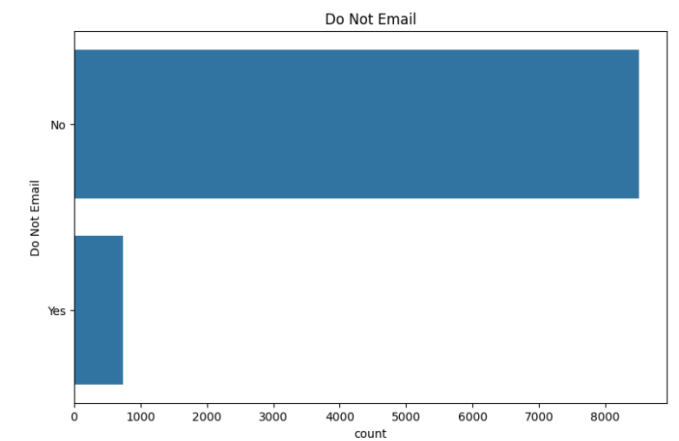
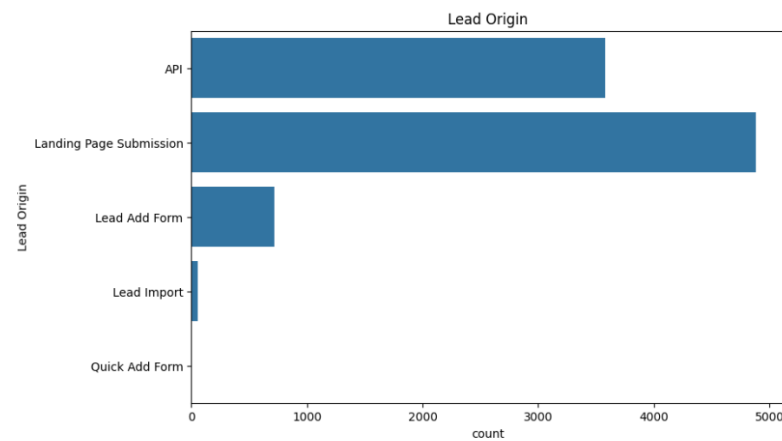
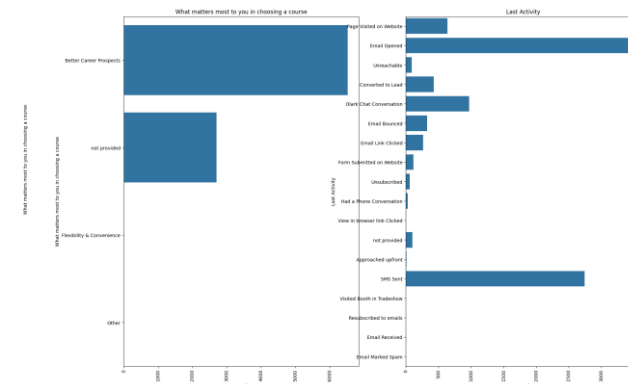
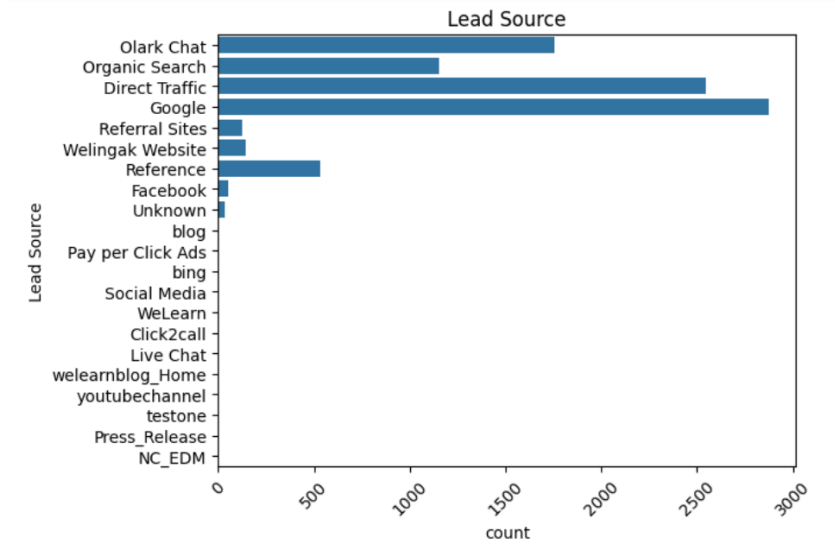
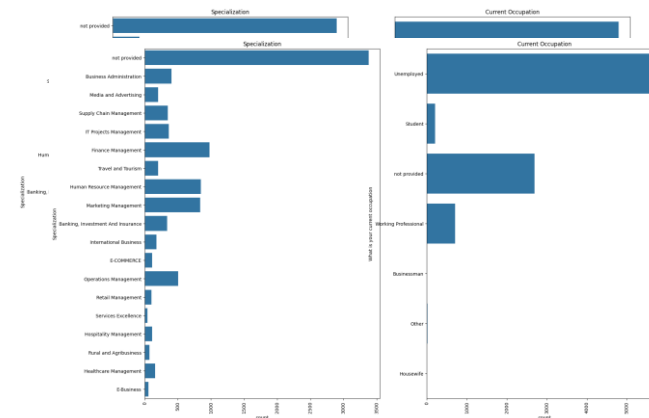
Model building

- Features selection – RFE
- Checking correlation between variables i.e., VIF and p-values

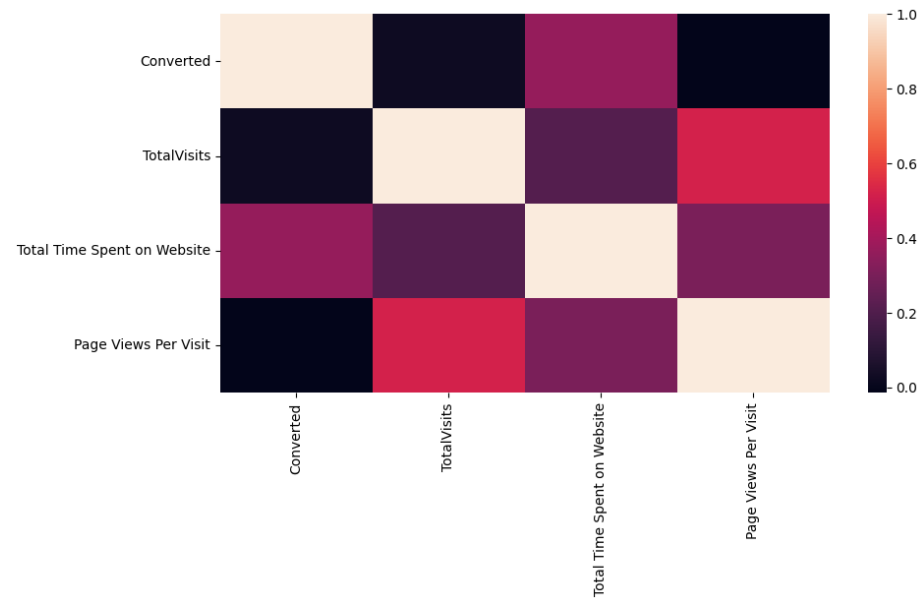
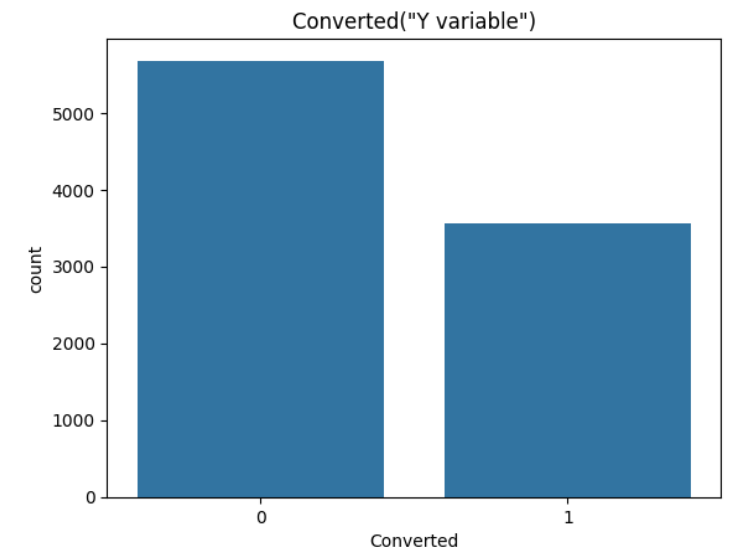
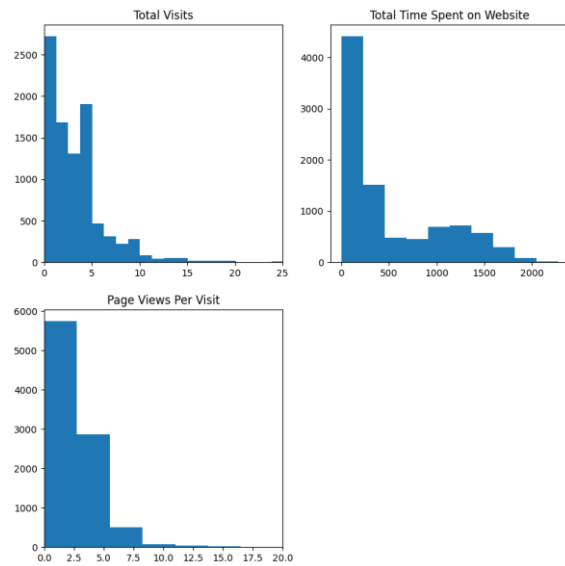
Model Evaluation

Making predictions

# EDA



# EDA



# Observations



## Train test Data

Accuracy: 82%

Sensitivity: 69%

Specificity: 89%



## Test test Data

Accuracy: 82%

Sensitivity: 75%

Specificity: 86%

- Feature list
  - Do Not Email
  - Total Time Spent on Website
  - Lead Origin\_Lead Add Form
  - Lead Source\_Welingak Website
  - Last Activity
    - Had a Phone Conversation
    - SMS Sent