

### **Problem Statement**

X Education is a platform that sells online courses to industry professionals.. The organization showcases its seminars on a few sites and web search tools like Google.

However, despite the fact that it gets a ton of leads, its lead transformation rate is exceptionally poor. For instance, only about 30 of the 100 leads they acquire in a day are converted.

#### Goal:

- ☐ The company wants to find the most promising leads, or "Hot Leads," in order to speed up this process.
- The sales team will now concentrate more on communicating with the potential leads rather than making calls to everyone if they are successful in identifying this set of leads. As a result, the lead conversion rate should rise.
- ☐ In particular, the CEO has stated that the target lead conversion rate should be around 80%.

### **Solution Strategy**

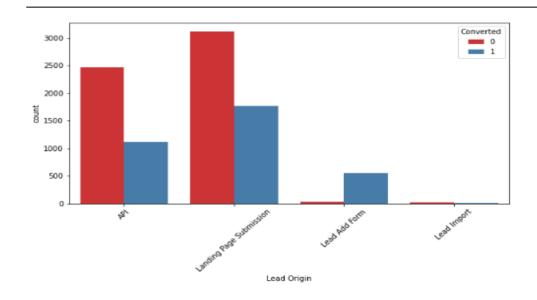
- ➤ Understanding the data
- ➤ Data Cleansing
- ➤ Exploratory Data Analysis
- ➤ Model Building
- ➤ Splitting the data into Test and Train dataset.
- ➤ Applying the best model in Test data
- **≻**Conclusion

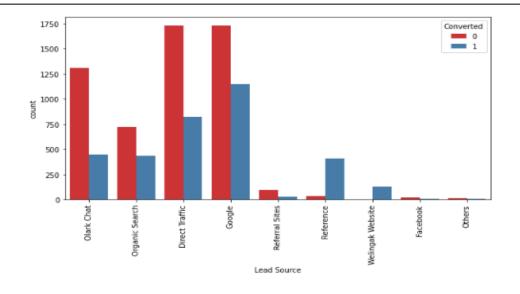
### **Data Cleansing**

- Read the data and looked at it.
- Converted the data into a clean format that was good for analysis. like changing "Select" values to "None"
- ➤ Dropped the columns with missing values greater than or equal to 40%.
- Analysed the missing values for the categorical columns
- ➤ Held 98% of the lines in the wake of cleaning the information .

# Exploratory Data Analysis

(The lead conversion rate is 38%.)



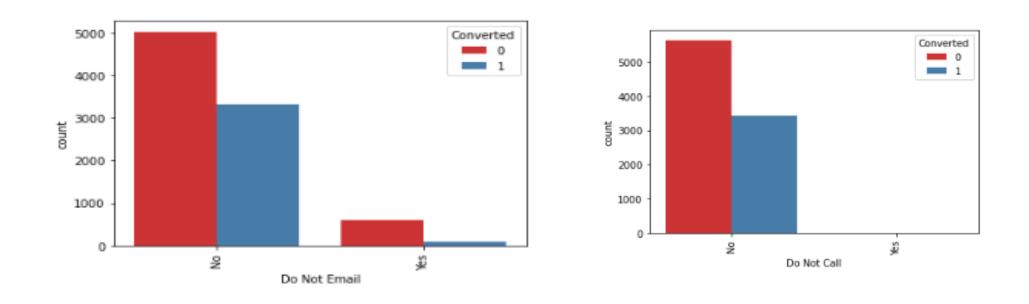


Although the number of leads generated by Lead Add Form is low, it has a conversion rate of over 90%

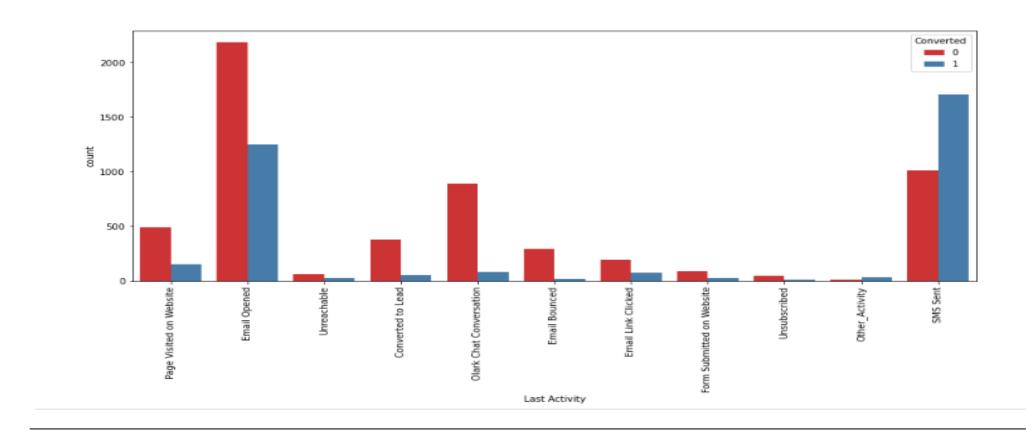
While the number of leads generated by API and Landing Page Submission is substantial, their conversion rates range from 30 to 35 percent.

Google and Direct traffic produces greatest number of leads.

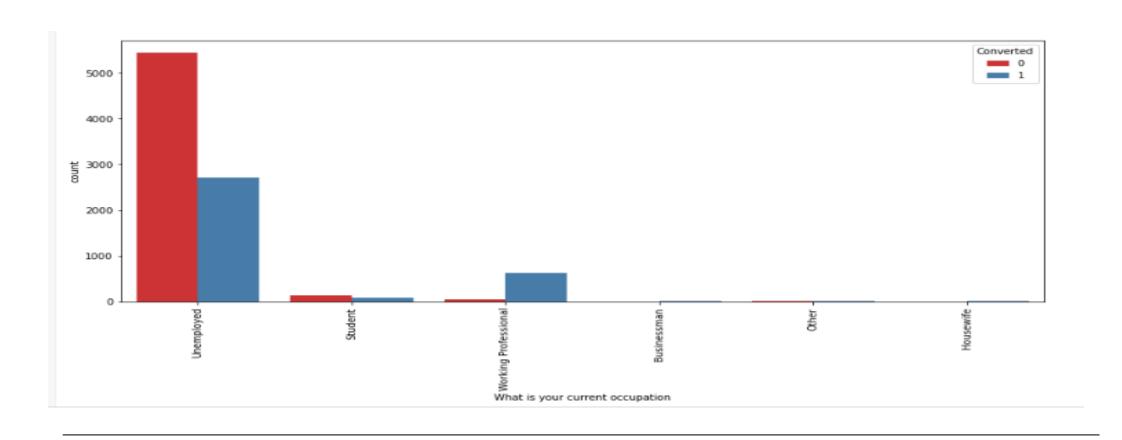
Transformation Pace of reference endlessly leads through welingak site is high.



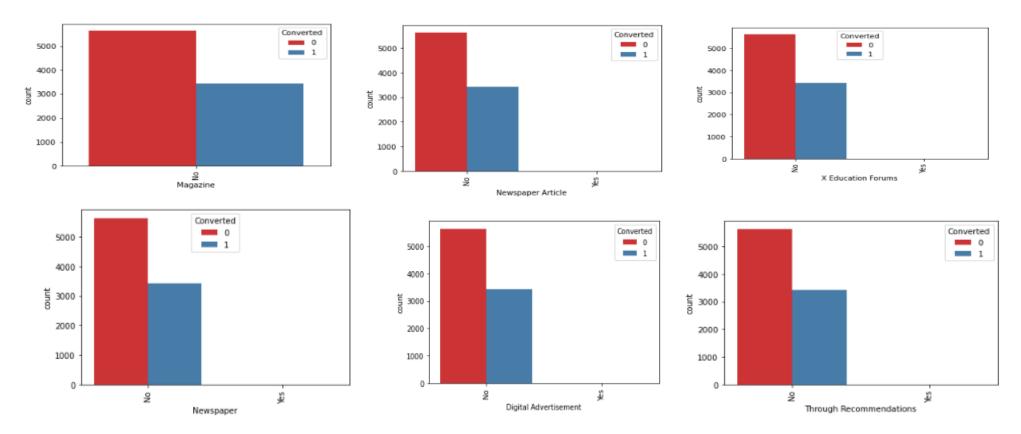
Mostly, Emails sent and phone calls made have resulted in significant conversions.



- Most of the lead have their Email opened as their last activity.
- Conversion rate for leads with last activity as SMS Sent is almost 60%.



- Working professionals who enrols in the course stand a good chance of joining.
- Unemployed leads are the most in numbers however has around 30-35% transformation rate.



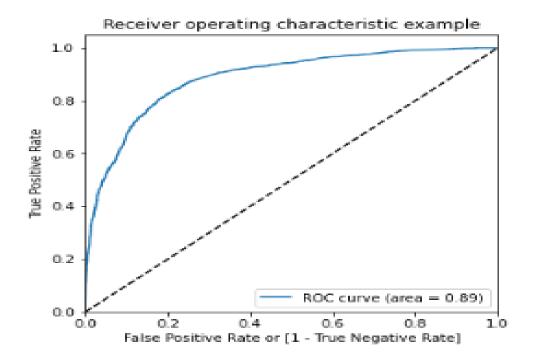
• Not much effect on conversion rates from newspaper, magazine, digital advertisement, and recommendation sources.

# Model Building

- □Converted some binary variables to 1/0 (Yes/No);
- □Created dummy variables for the categorical features
- □Divided the data into 70-30 training and testing sets.
- ☐ Used RFE for feature selection.

### ROC Curve

We have a higher area under the ROC curve (0.89).

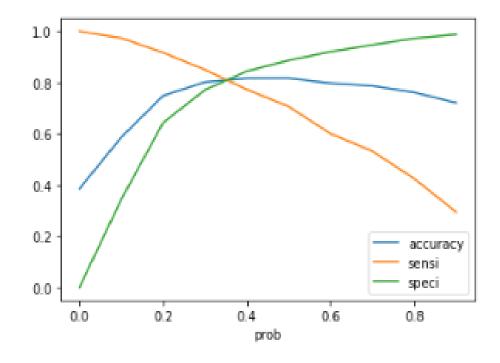


Since we have higher (0.90) area under the DOC ourse. theref

## Optimal Cutoff Point

The graph depicts an optimal cut off of 0.37 based on Accuracy, Sensitivity and Specificity

#### Sensitivity and Specificity on Train Data Set



## Conclusion

- ❖ Calls should be made to leads from "Welingak Websites" and "Reference" because these leads are more likely to become customers.
- ❖ The leads that are "working professionals" should be contacted by the business because they are more likely to be converted.
- ❖ The organization ought to settle on decisions to the leads who spent "additional time on the sites" as these are bound to get changed over.
- ❖The organization ought to settle on decisions to the leads coming from the lead sources "Olark Chat" as these are more likely to get converted.
- ❖The organization ought to settle on decisions to the leads whose last movement was SMS Sent