

# LEAD SCORING



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## Problem statement

- X Education is an online education company that sells courses to industry professionals.
- The company generates a large number of leads from various sources such as website visitors, form fill-ups, and referrals, but its lead conversion rate is only 30%.
- To improve this conversion rate, X Education wants to identify the most potential leads, also known as "Hot Leads." The company requires a lead scoring model that assigns a lead score to each lead based on the likelihood of conversion.
- The CEO has set a target lead conversion rate of 80%. The lead scoring model should help the sales team to prioritize potential leads that have a higher conversion chance and enable them to focus on communicating with them.
- By nurturing these potential leads, X Education can increase their chances of converting them into paying customers and achieve their target conversion rate.

## **Business Goal**

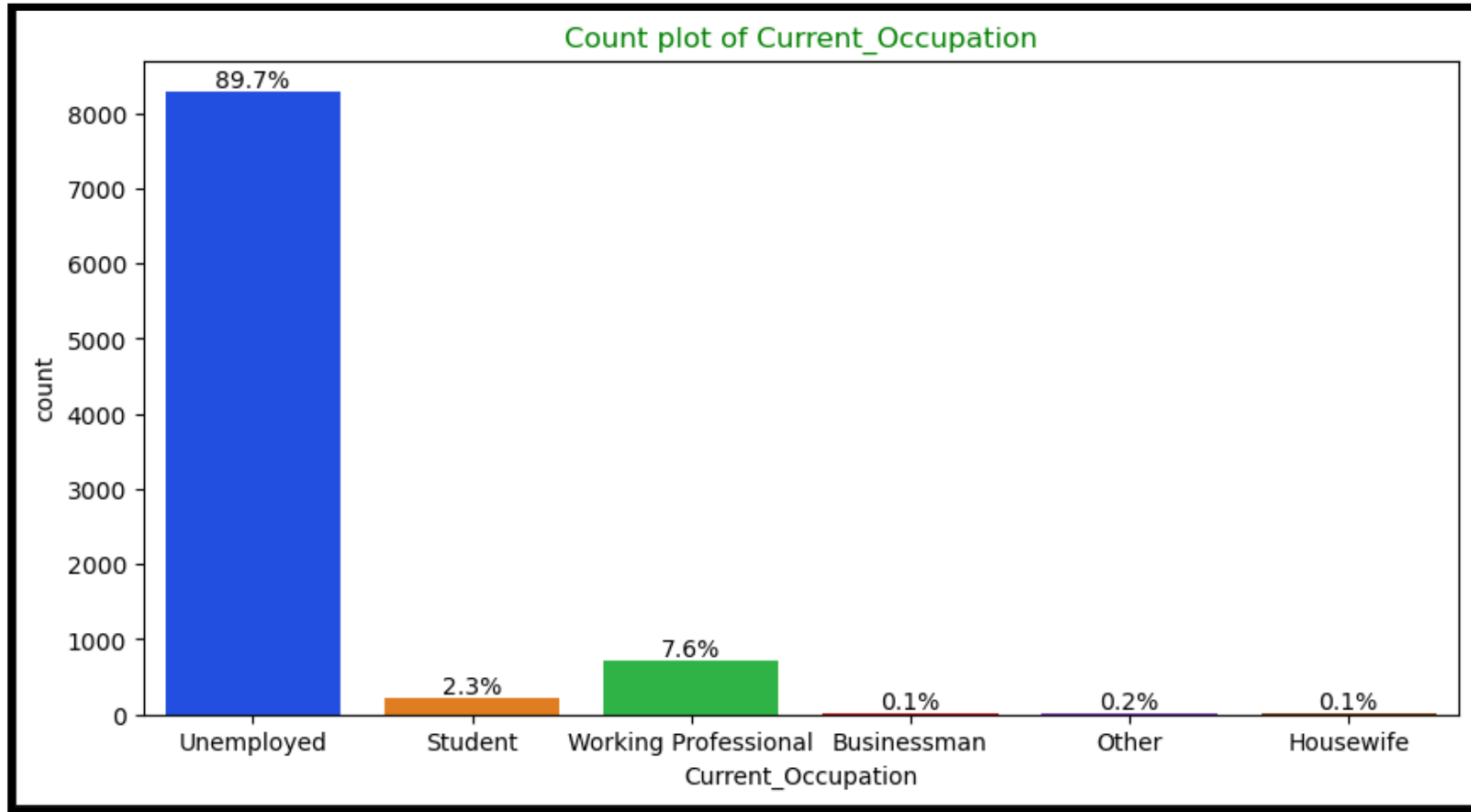
To build a logistic regression model to assign a lead score between 0 and 100 to each of the leads which can be used by the company to target potential leads. A higher score would mean that the lead is hot, i.e. is most likely to convert whereas a lower score would mean that the lead is cold and will mostly not get converted.

The model to be built in lead conversion rate around 80% or more.

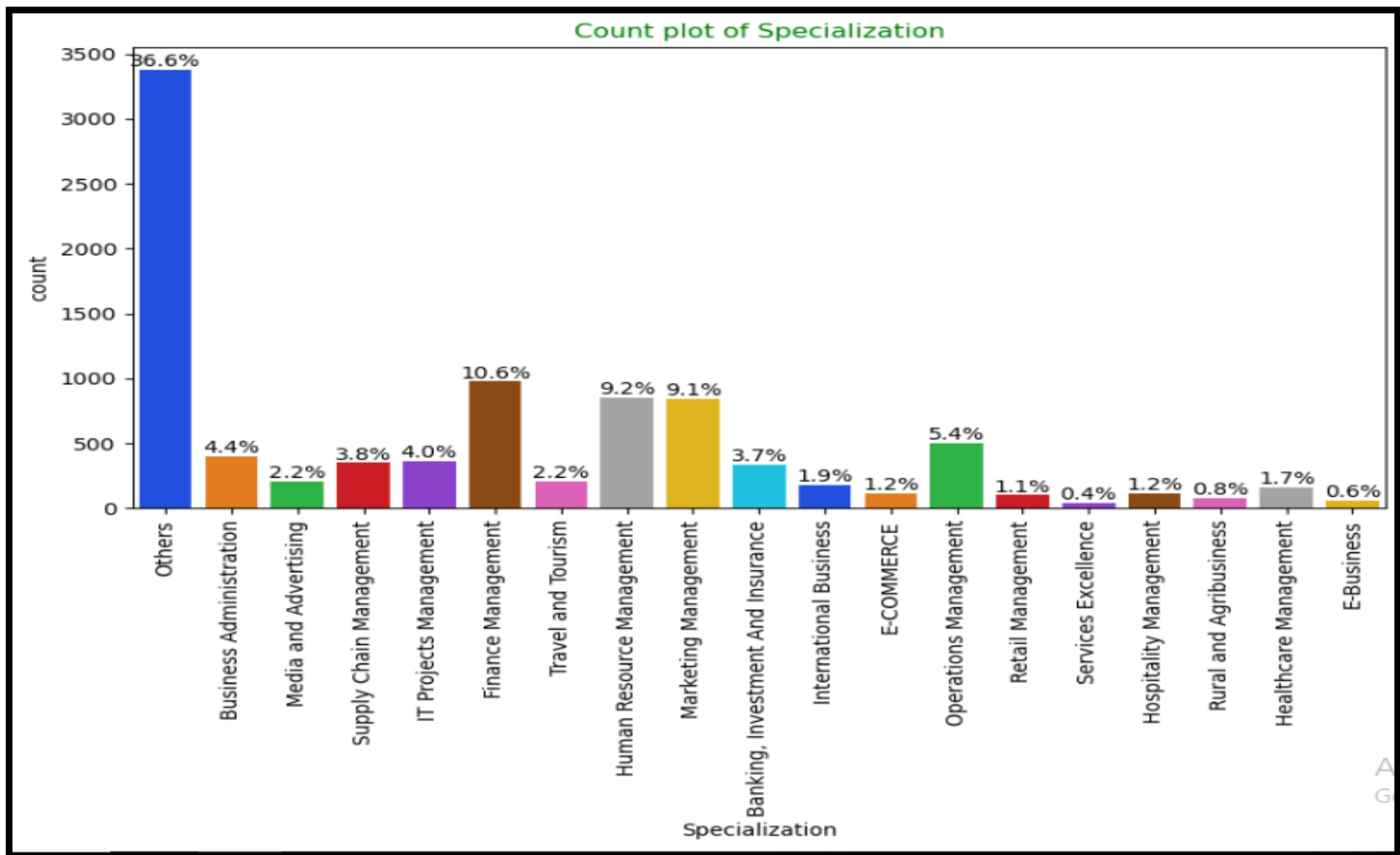
## **Strategy/ Steps involved to analyze the data**

- Importing data & libraries
- Cleaning & preparing the data
- Exploring data( Bivariate & univariate analysis )
- Scaling features
- Preparing the data
- Building a model using logistics regression
- Test- train set to verify the model
- Evaluate model using metrics
- Measure the metrics for evaluation

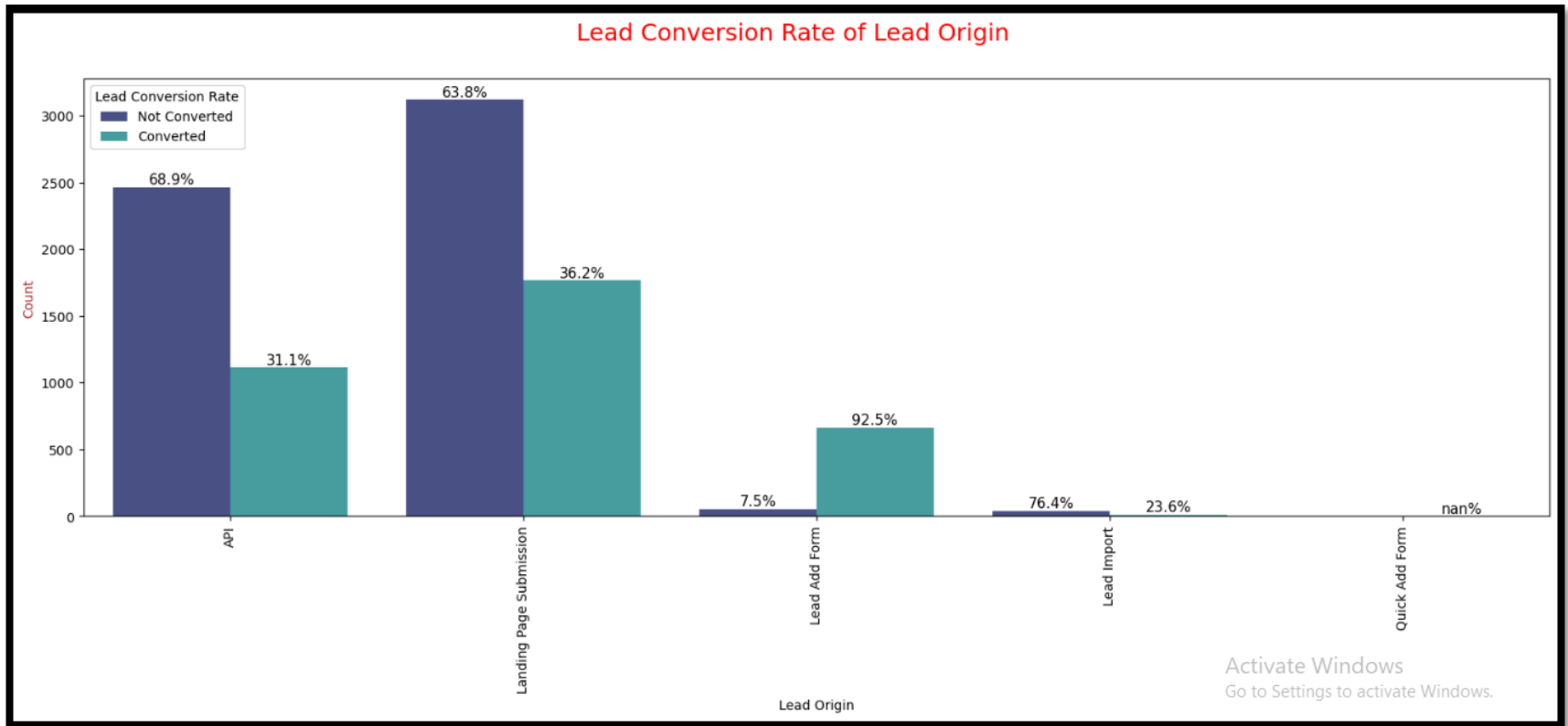
## Exploring Data



A significant proportion of customers, 89.7%, are unemployed based on the current occupation information.



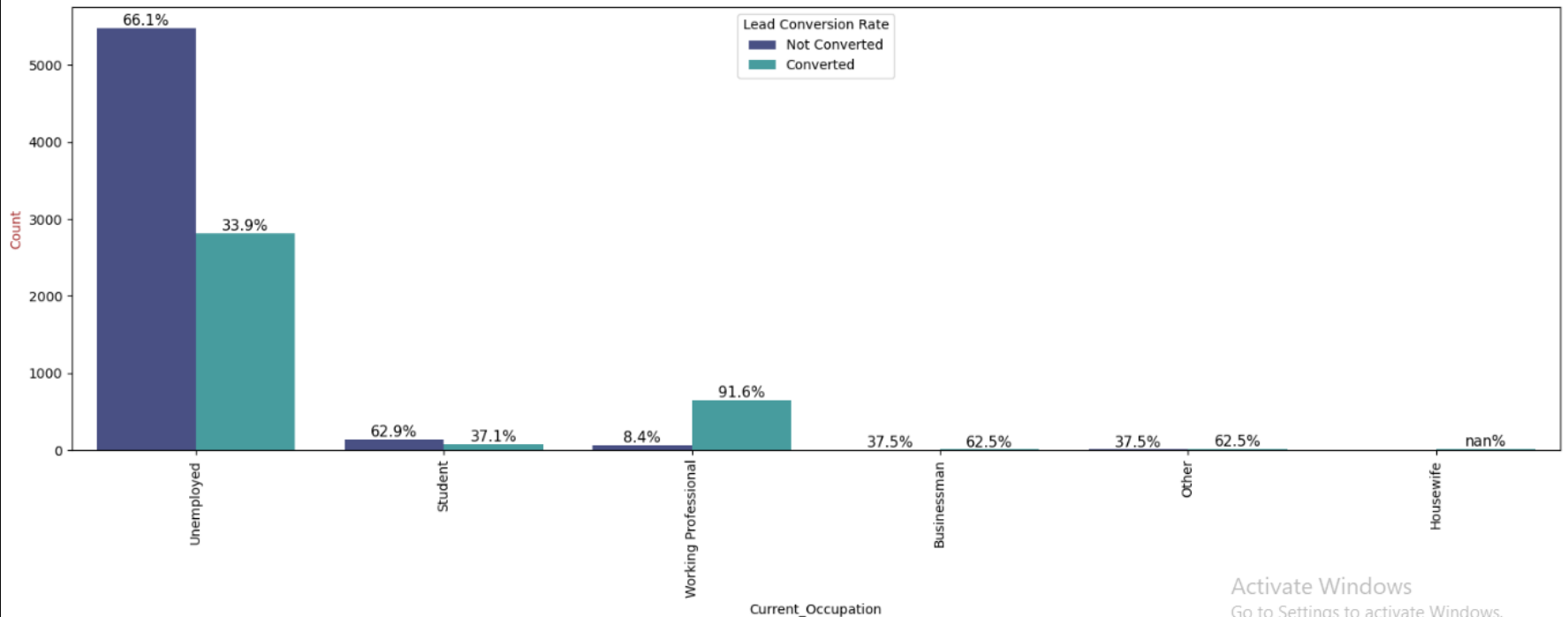
The 'Others' specialization category is the most common among customers at 36.6%, followed by Finance Management at 10.6%, HR Management at 9.2%, Marketing Management at 9.1%, and Operations Management at 5.4%.



'Landing Page Submission' is the most effective Lead Origin with a Lead Conversion Rate (LCR) of 36.2%, followed by 'API' at 31.1%.

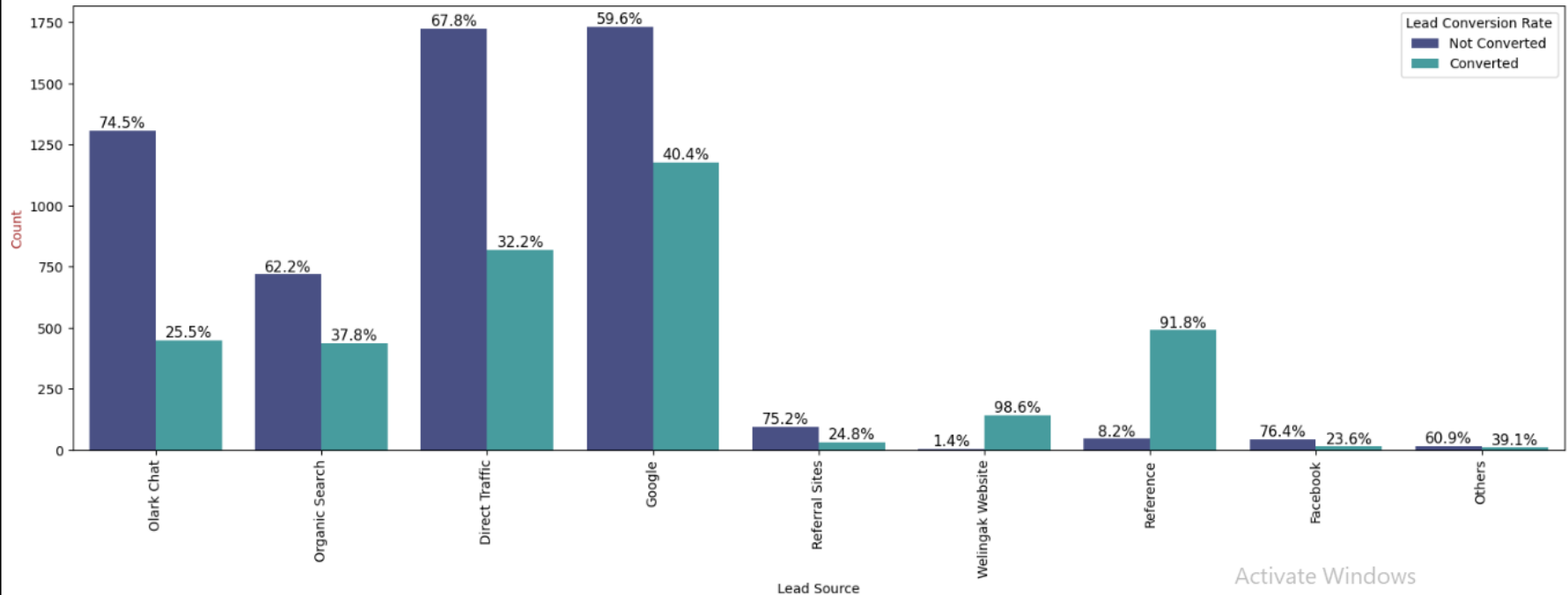


Lead Conversion Rate of Current\_Occupation



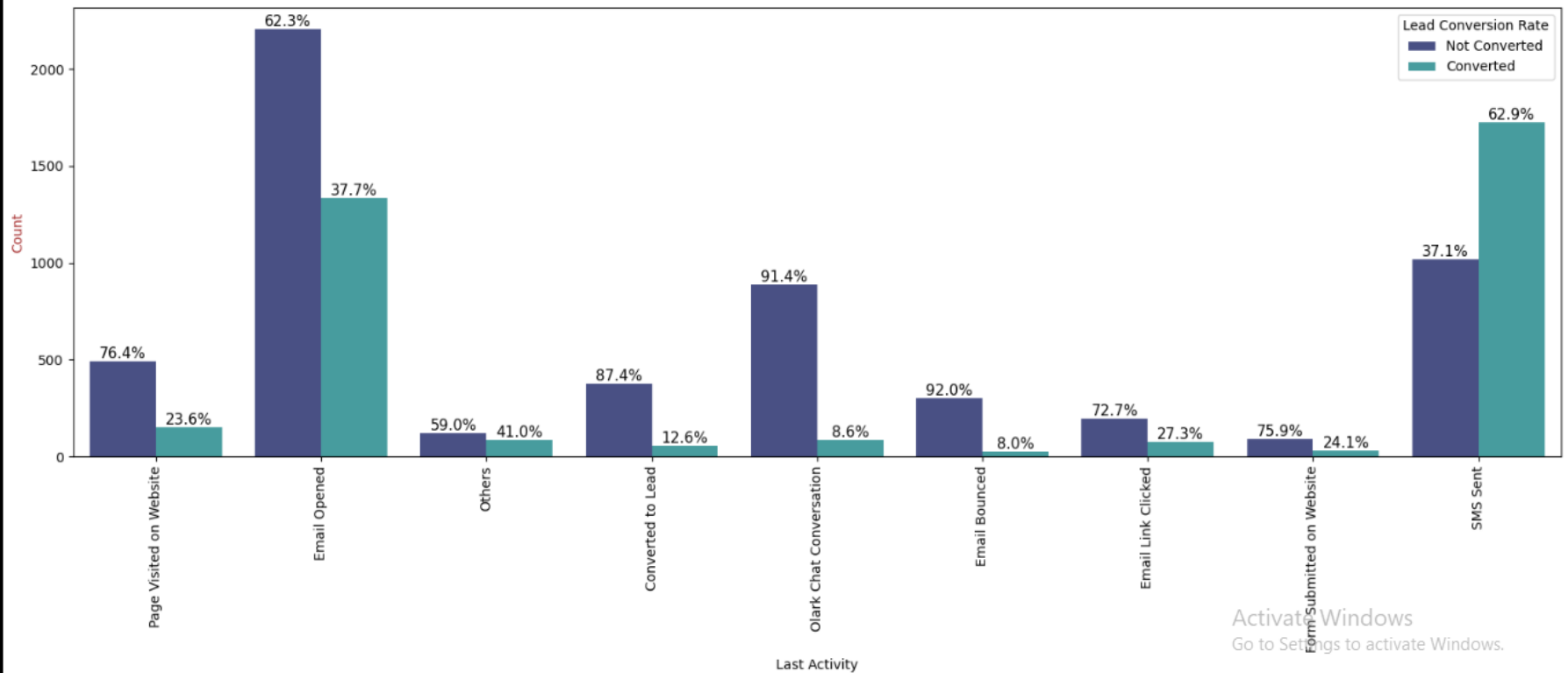
Working Professionals have a significantly higher LCR at 91.6% compared to Unemployed people at 33.9%.

Lead Conversion Rate of Lead Source



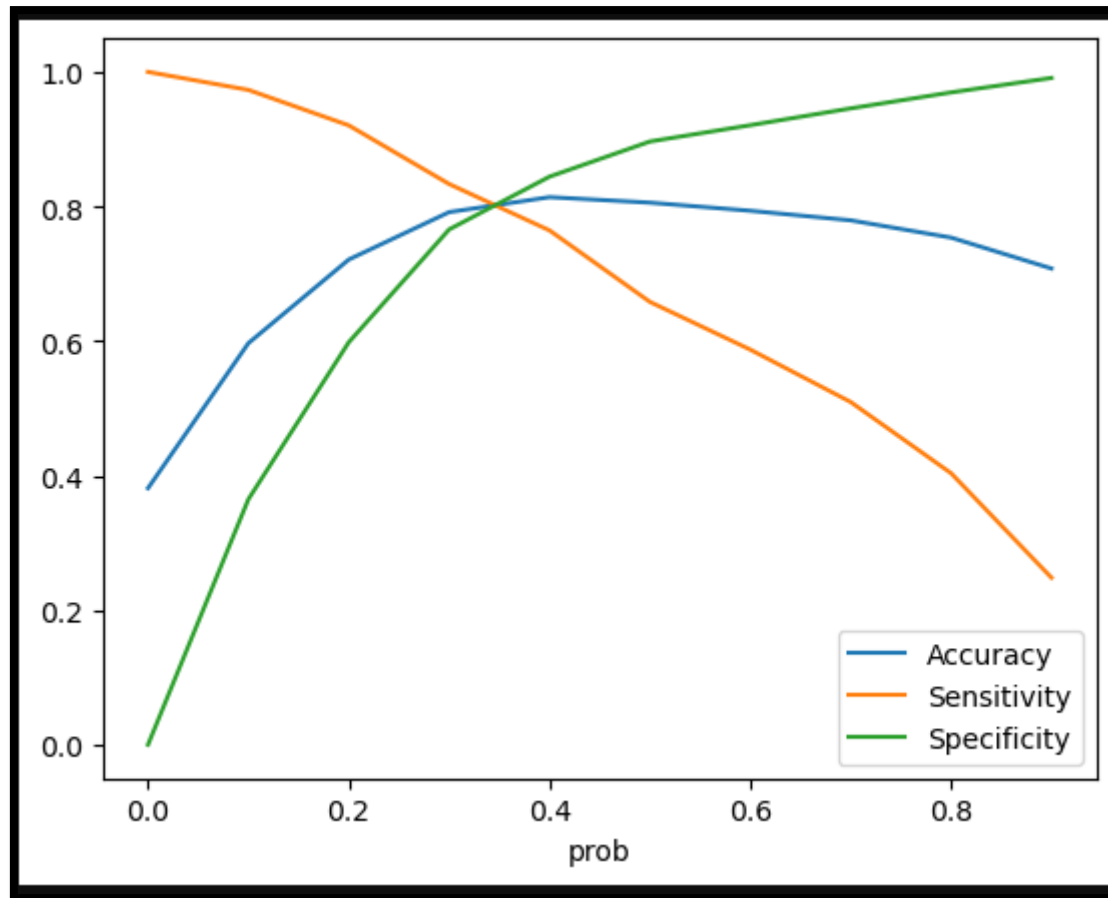
Google is the most effective Lead Source with an LCR of 40.4%, followed by Direct Traffic at 32.2% and Organic Search at 37.8% (contributing to only 12.5% of customers). Reference has the highest LCR at 91.8%, but there are only 5.8% of customers through this Lead Source

### Lead Conversion Rate of Last Activity



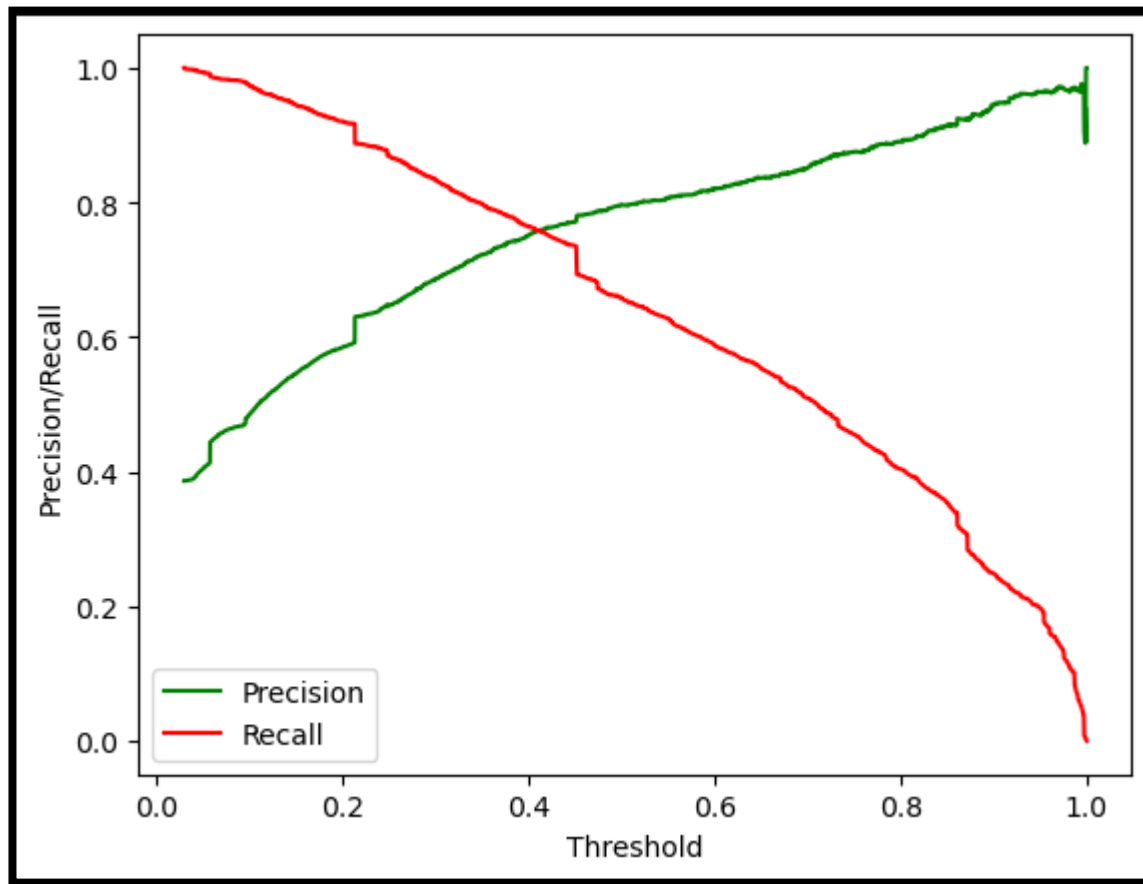
SMS Sent and Email Opened are the most effective Last Activity types with LCRs of 62.9% and 37.7% respectively

## Model Evaluation (TRAIN SET)



1.Accuracy: 80.61%,  
2.Sensitivity: 79.80%,  
3.Specificty: 81.10%

## Model Evaluation (TEST)



1. Accuracy: 80.19%
2. Sensitivity: 78.99%
3. Specificity: 80.97%

## Recommendations

- Should be more focused on leads source like reference & Wilingak website
- Working professionals to be aggressively targeted as they have high conversion rate
- Leads whose 'Last activity ' is ' SMS Sent' or Email opened' tend to have a higher conversion rate and should be targeted more frequently
- Customer who is spending more time on website likely to get converted easily, so create some interesting content for so that they could engage on website and attract towards course
- Understanding popular specializations helps tailor course offerings and marketing to attract and retain customers in those fields. Targeted content and resources for areas like Marketing Management and HR Management enhance engagement and customer satisfaction
- Increasing the frequency of media usage such as Google ads or email campaigns can save time and increase the conversion rate.