



LEAD SCORING CASE STUDY

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INTRODUCTION

- An education company named X Education sells online courses to industry professionals.
- many professionals who are interested in the courses land on their website and browse for courses.
- The company markets its courses on several websites and search engines like Google.
- Once these people land on the website, they might browse the courses or fill up a form for the course or watch some videos.
- When these people fill up a form providing their email address or phone number, they are classified to be a lead.



BUSSINESS PROBLEM & OBJECTIVE

- X Education gets a lot of leads, its lead conversion rate is very poor. 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.
 - X education wants to know most promising leads. For that they want to build a Model which identifies the hot leads.
 - Deployment of the model for the future use.
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SOLUTION MAPPING

Data cleaning and data manipulation.

1. Check and handle duplicate data.
2. Check and handle NA values and missing values.
3. Drop columns, if it contains large amount of missing values and not useful for the analysis.
4. Imputation of the values, if necessary.
5. Check and handle outliers in data.

EDA

1. Univariate data analysis: value count, distribution of variable etc.
2. Bivariate data analysis: correlation coefficients and pattern between the variables etc.

Feature Scaling & Dummy Variables and encoding of the data.

Classification technique:

Logistic regression used for the model making and prediction.

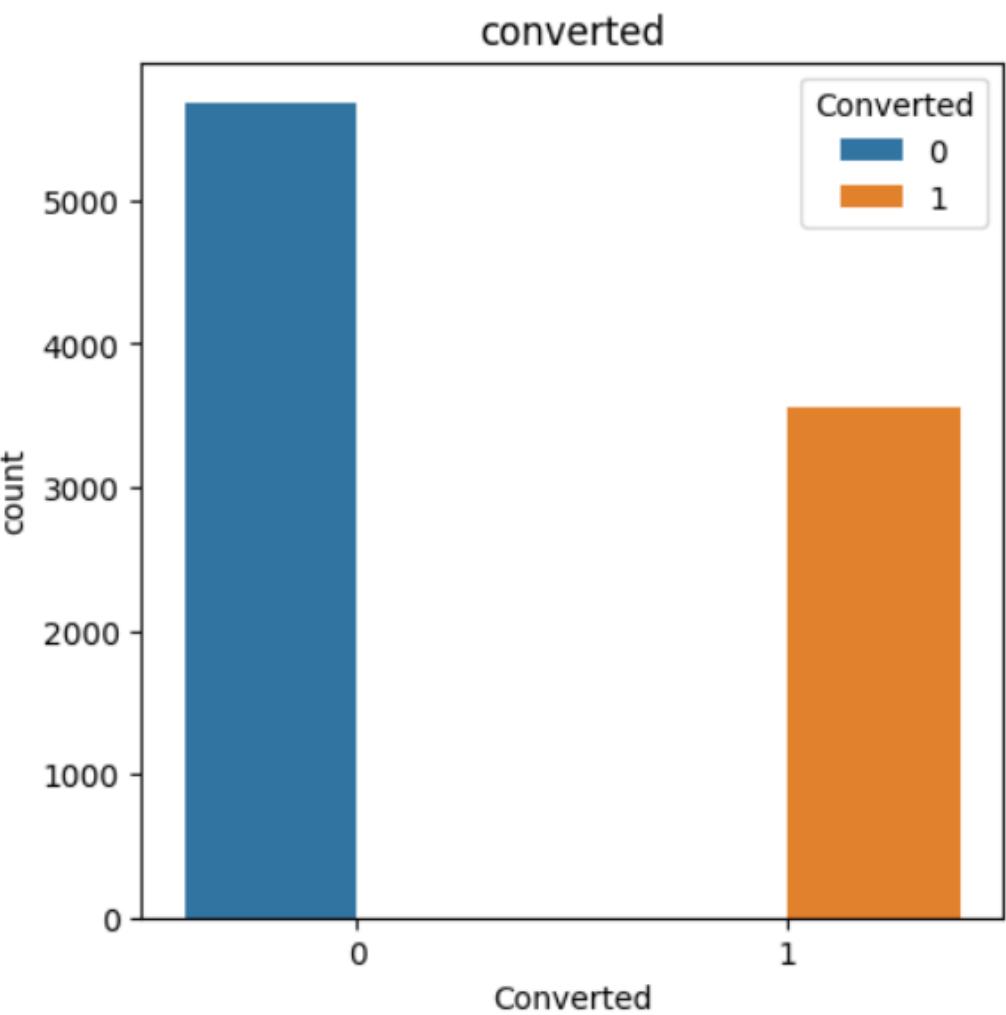
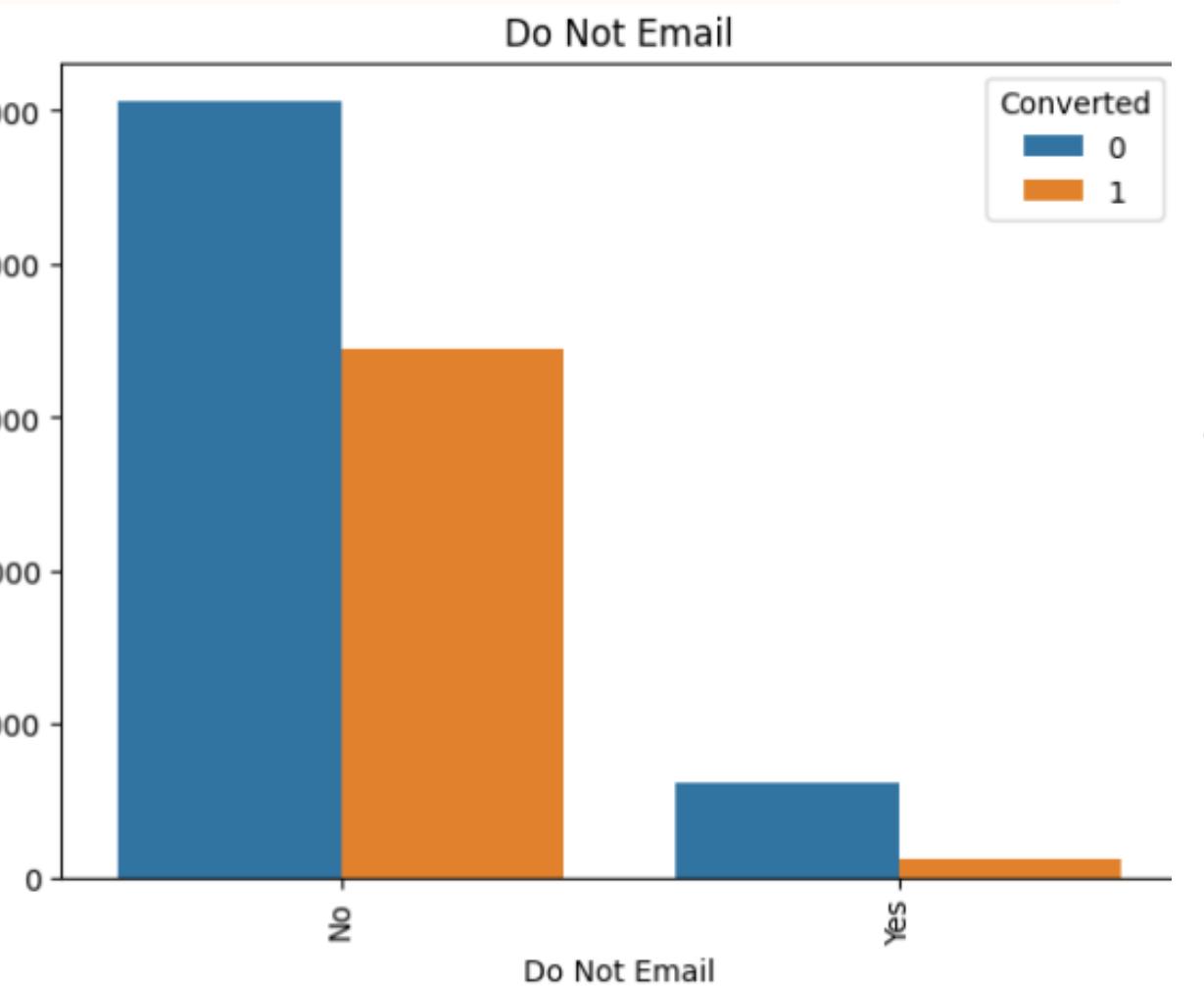
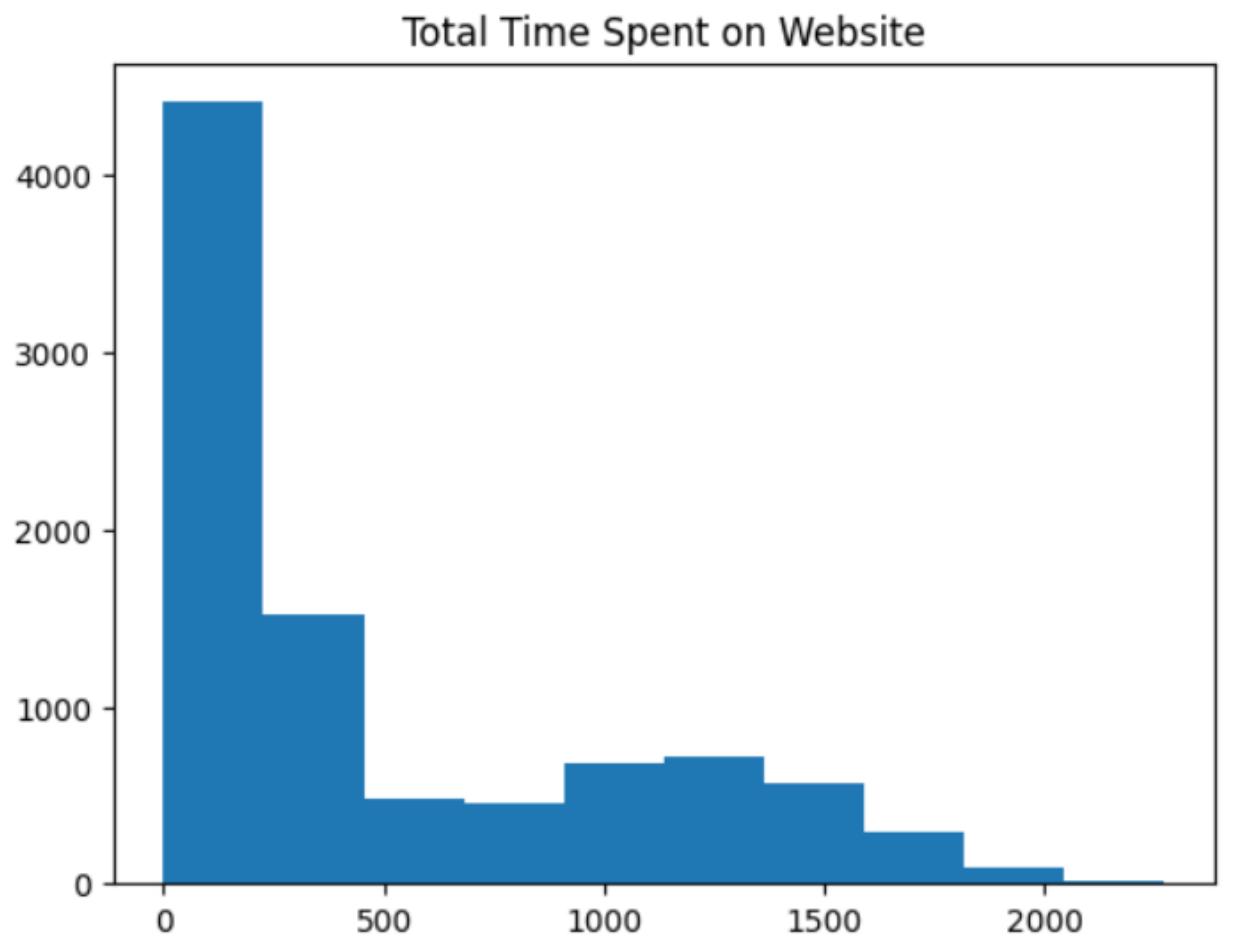
Validation of the model.

Model presentation.

Conclusions and recommendations.

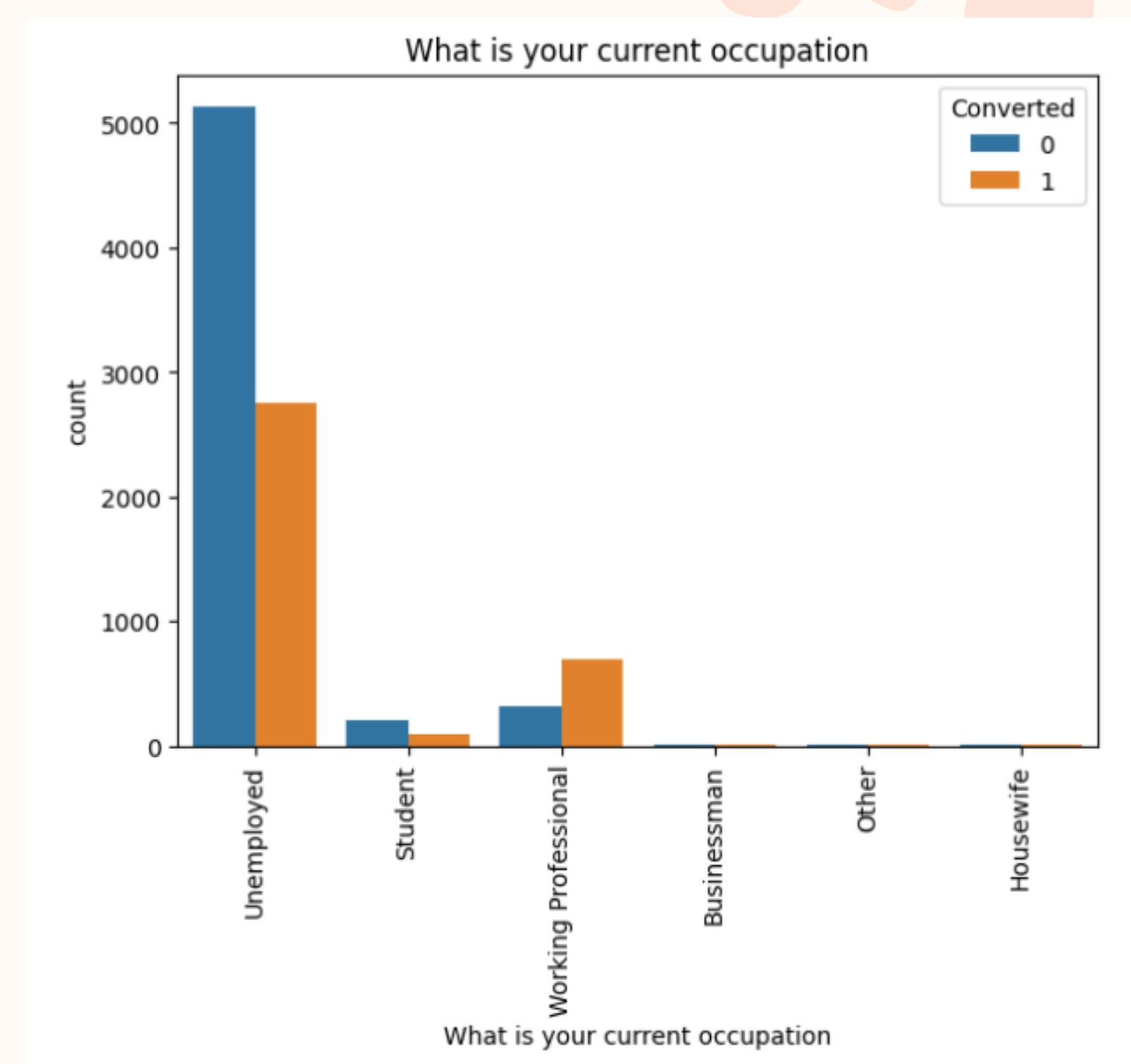
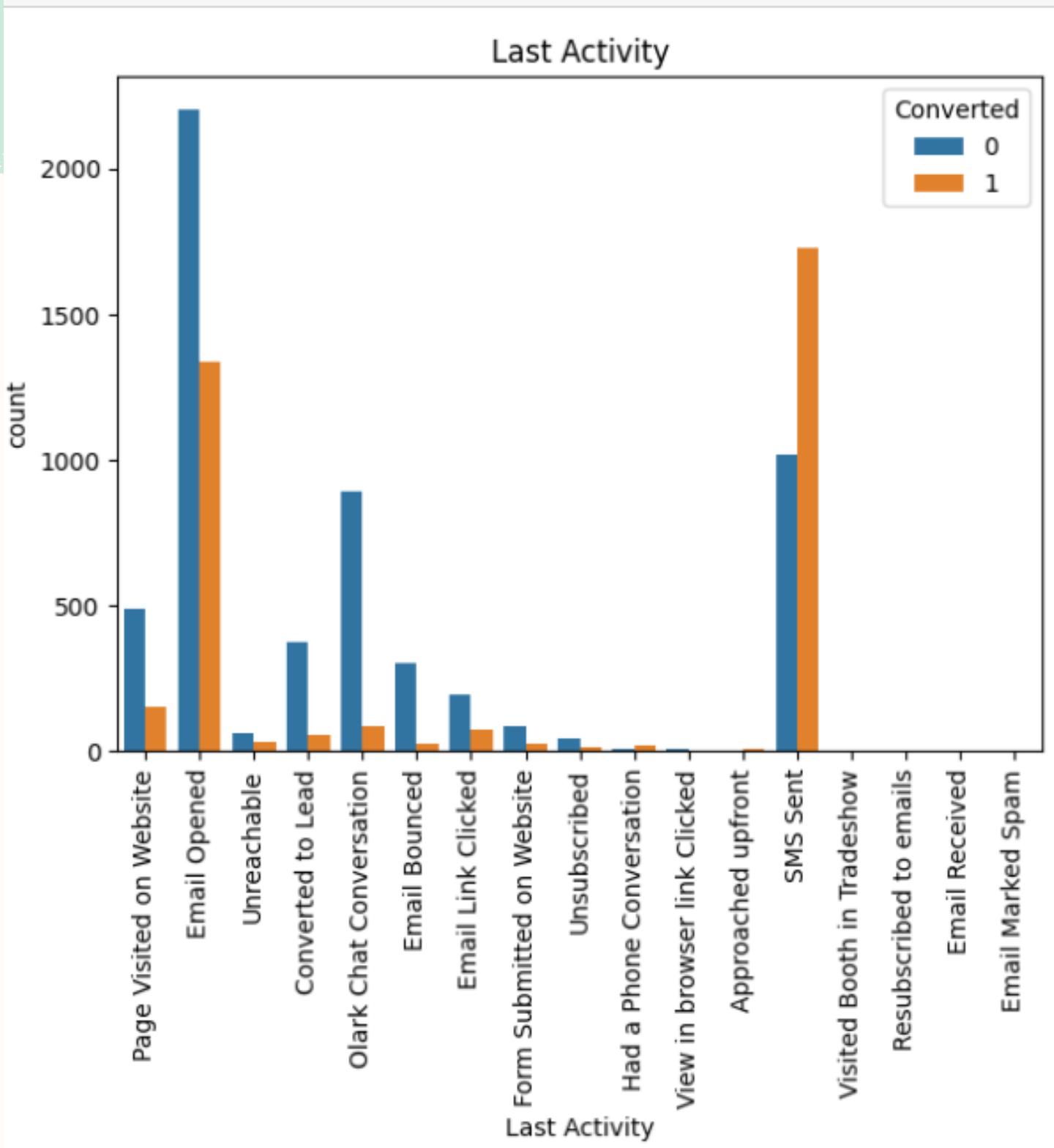
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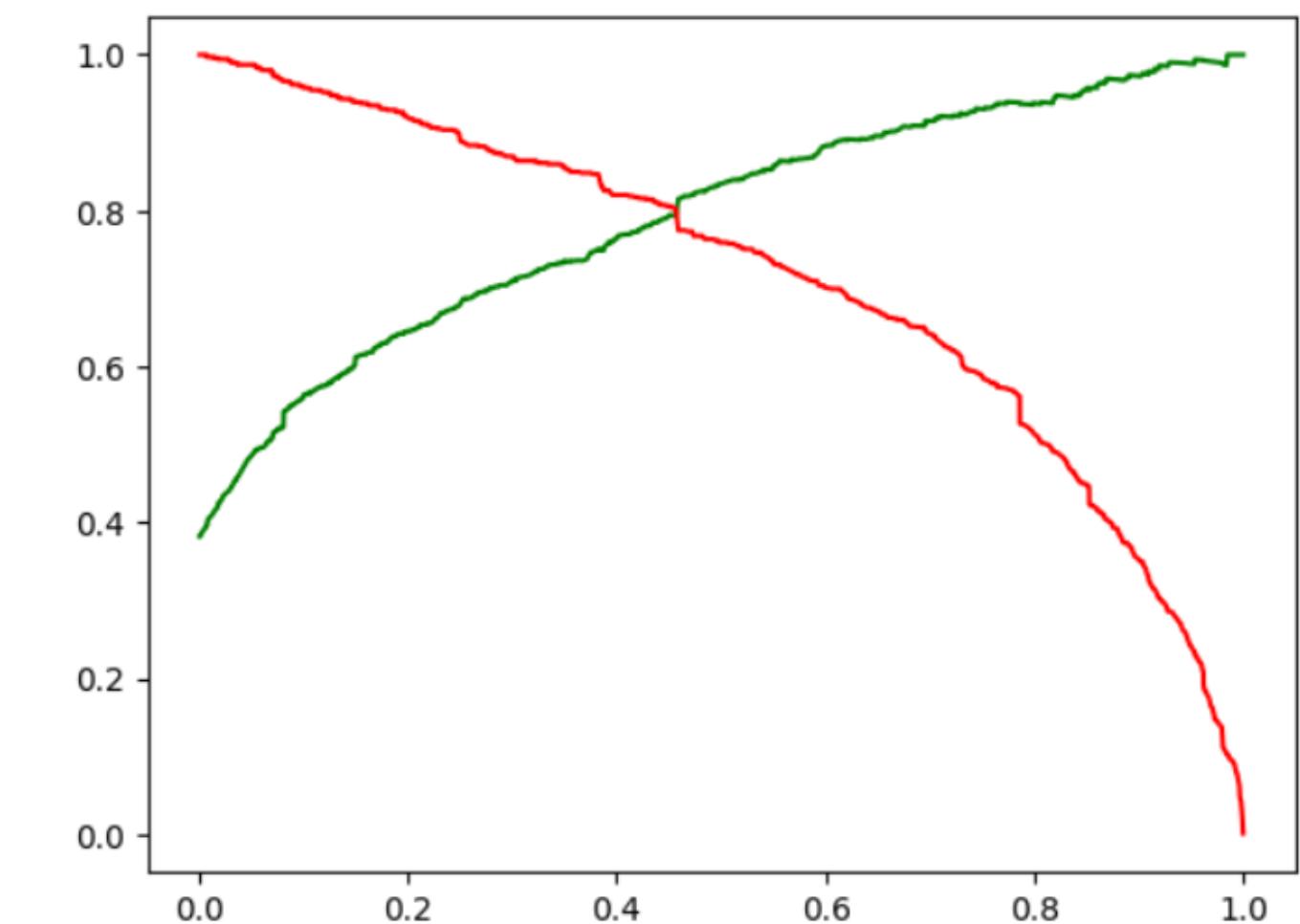
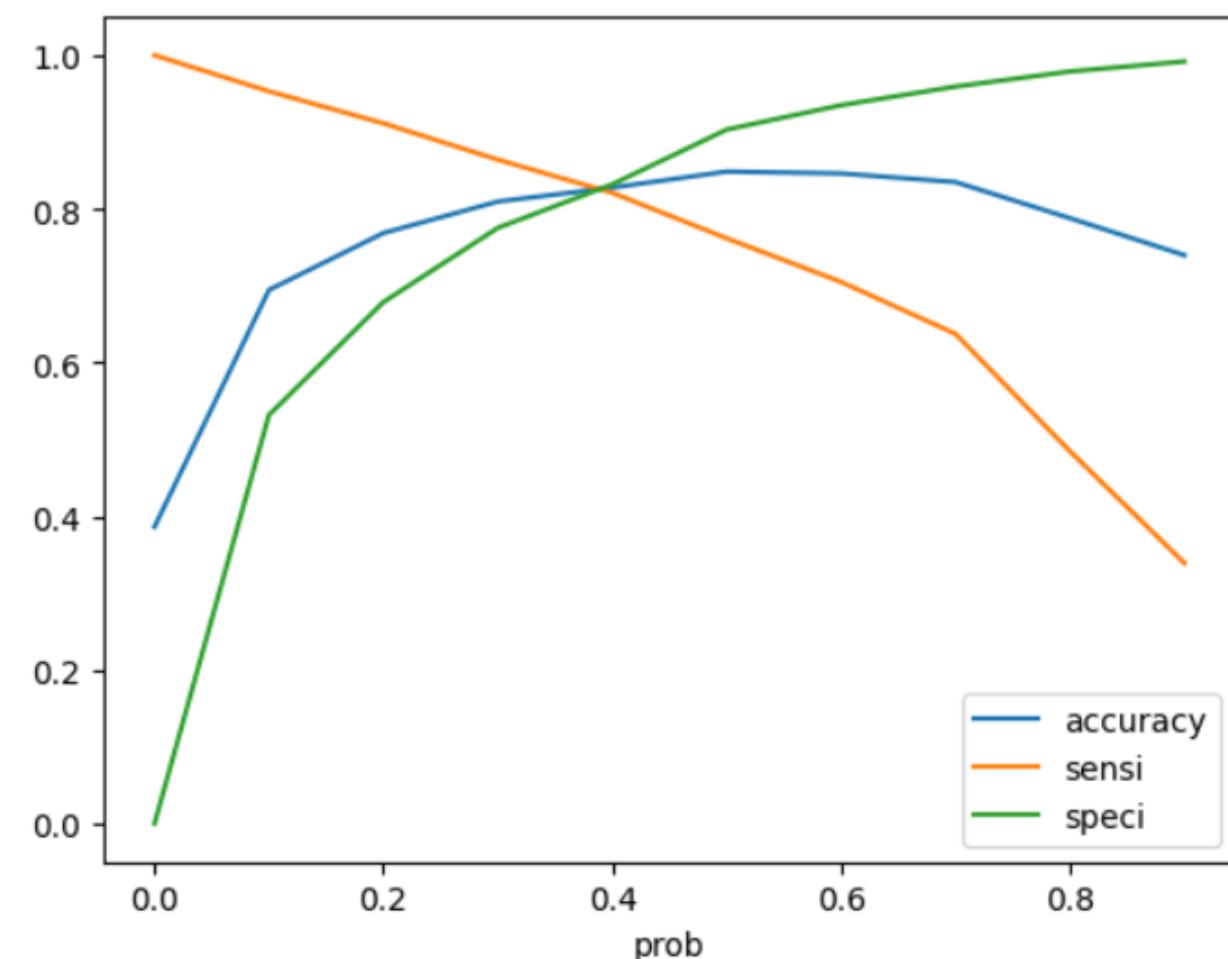
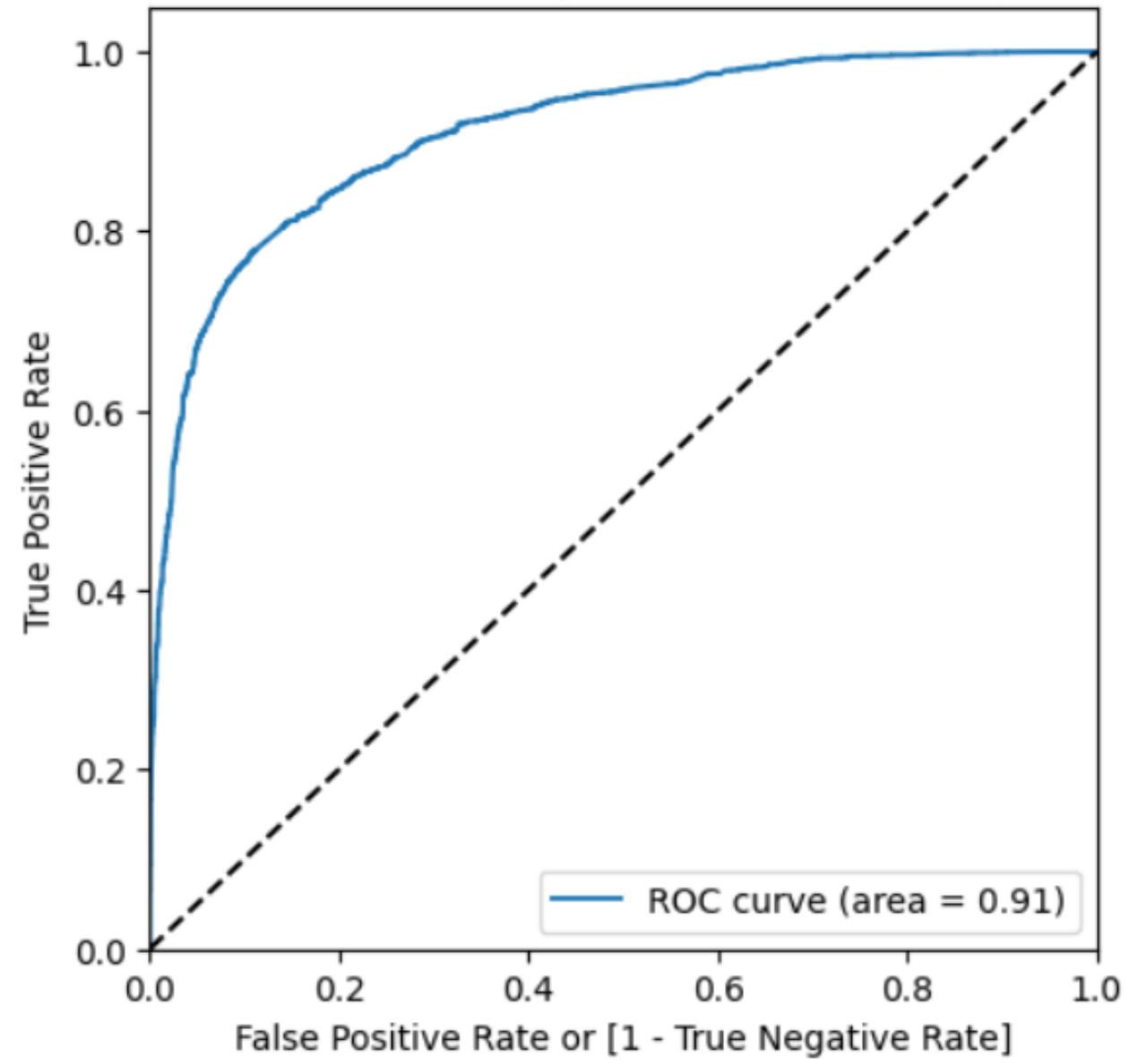


MODEL BUILDING

- Splitting the Data into Training and Testing Sets
- The first basic step for regression is performing a train-test split, we have chosen 80:20 ratio.
- Use RFE for Feature Selection
Running RFE with 20 variables as output
- Building Model by removing the variable
- whose p- value is greater than 0.05 and vif value is greater than 3
- Predictions on test data set
Overall accuracy 85%

ROC CURVE

Receiver operating characteristic example



CONCLUSION

- When the lead origin is Lead add format.
- When their current occupation is as a working professional. Keeping these in mind 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
- We found that the variables that mattered the most in the potential buyers are :
 - Total Time Spent on Website
 - Lead Origin : Landing Page Submission
 - Lead Source : Direct Traffic
 - Lead Source : Olark Chat
 - Lead Source : Reference
 - Do Not Email : Yes
 - Last Activity : Olark Chat Conversation
 - Last Activity : SMS Sent
 - What is your current occupation : Working Professional
 - Last Notable Activity : Modified
 - Tags : Closed by Horizzon
 - Tags : Interested in other courses
 - Tags : Ringing
 - Tags : Will revert after reading the email

RESULTS

	Cut-offs	For train data	For test data
0	Before plotting graph for cut-off	85%	83%
1	After plotting graph for cut-off	83%	85%



BUSINESS DECISION RECOMMENDATION

Certainly, here are the steps that could be recommended to CEO for further decisions:

Personalized Engagement:

Tailor emails, messages, and offers to each lead's interests and needs, showing them the value of the courses.

Prompt Follow-Up:

Respond quickly to inquiries and schedule follow-up calls to discuss course benefits and address concerns.

Exclusive Incentives:

Offer limited-time discounts or special offers to create urgency and encourage lead action.

Engaging Events:

Organize webinars, workshops, or live demos to interactively showcase course content and benefits.

Feedback and Adaptation:

Continuously gather feedback, analyze engagement data, and adapt your strategies to improve conversion rates.



Thank
you