

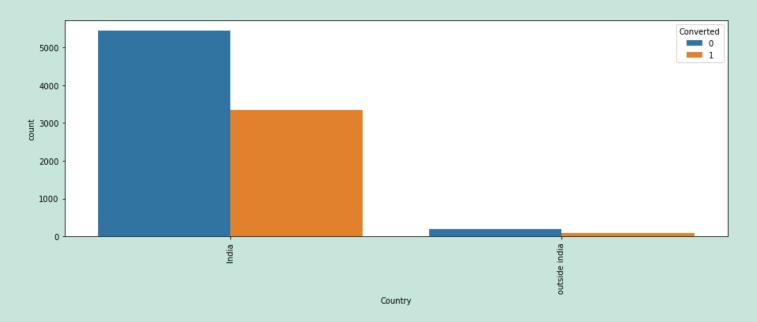
Problem Statement

- X Education, which is a company that sells online courses, want to increase their lead conversion rate.
- They want to identify the most potential leads which is also known as the hot leads.
- This is so that they can concentrate on these leads and create more sales conversions.

Solution Steps

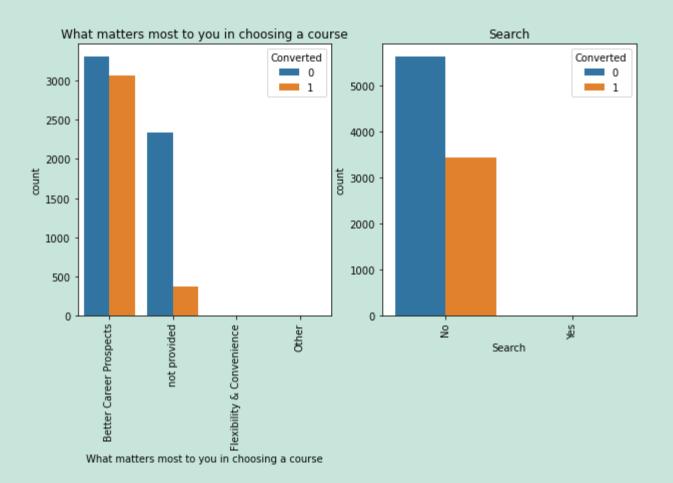
- First checked and handled duplicate data. Also handled null and "NA" values.
- Dropped the unnecessary columns and imputed values where necessary.
- Handled outliers in the data.
- Then we performed EDA and did validation of the model.
- Then we arrived with conclusions and recommendations.





We can see that most of the data points are from India

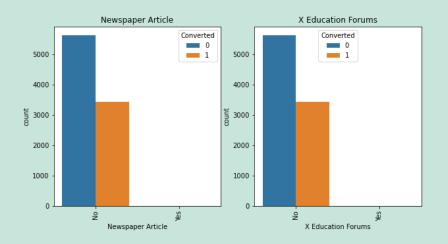
EDA

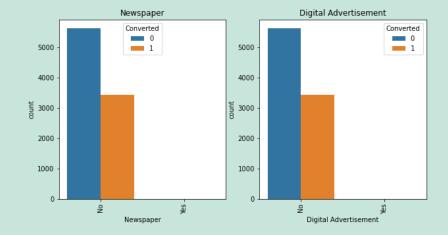


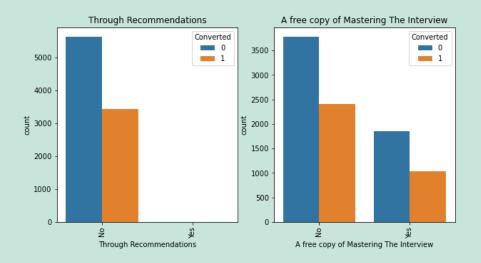
We can see that those with the interest of "Better Career Prospects" would most likely convert to a sale.



Following is the different channels and conversions for the same.

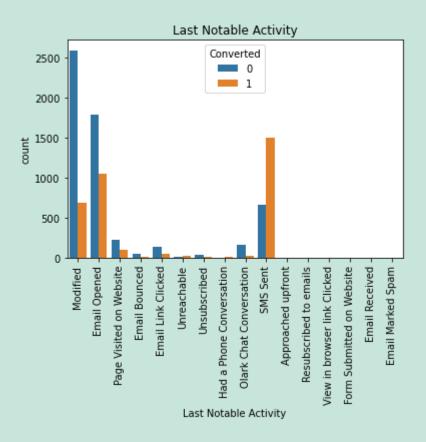








These were the last notable activities that users did.

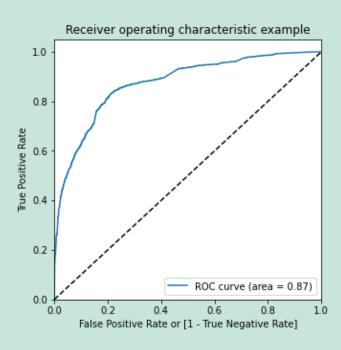


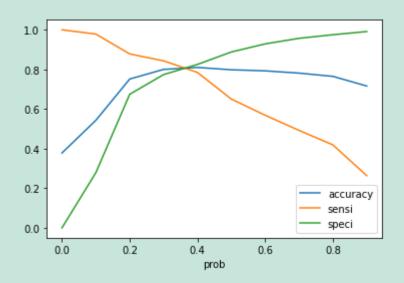
We can see that those marketed by SMS are most likely to convert.

Model Building

- Splitting the data into training and test sets using the ratio 70:30
- Use RFE for feature selection with 15 variables.
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- Remove the variables whose P value is greater than 0.05 and VIF value is greater than 5.

ROC Curve





We are trying to find an optimal cut off probability to get a balanced sensitivity and specificity. The optimal cut off is around 0.35.

Conclusion

- Variables that mattered the most:
 - 1) Total time spent on website
 - 2) Total number of visits
 - 3) When lead source was the following: Google, Direct Traffic, Organic Search, Welingak Website
 - 4) When the last activity was the following: SMS, Olark chat conversation
 - 5) When the current occupation is working professional

When X Education concentrates on the above variables, it will be ale to flourish with more leads.