

Summary

- X Education sells online courses to industry professionals. They market it's courses in multiple websites and based on number of people filling the form, leads gets created. Their current lead conversion rate is 30%, need to build a model which will help in increasing the lead conversion rate to 80% . X education wants a model which will assign a lead score to leads and higher the lead score, more chances of lead conversion.

During this process, I have learnt below methods which helped to build model to solve the Xeducation business problem.

Exploratory Data Analysis:

- Many values have unique data, which will not help in making any decision, hence removed the columns.
- Few columns were causing data imbalance, as in most of the volumes were unique so it will also not help in making better decision so removed them.
- Many columns had missing values, so by taking 40% as limit, dropped those columns.
- Using graphs, dealt with categorical data and it helped with visualizing the data.

Train-Test split & Scaling :

- Considered using 70-30 ratio to perform Train-Test split
- Scaling was done using min-max

Model Building

- This model helped to select which matrix can be used, saw the application of RFE
- Also used VIF and P value
- A confusion matrix was created, and overall accuracy was checked.

Model Evaluation

Train Data:

Accuracy 80.91%
Sensitivity 79.94%
Specificity 81.50%.

ROC curve has helped to find cutoff, and we can compare the other matrix:

Accuracy 80.91%
Sensitivity 79.94%
Specificity 81.50%.

Test Data

Accuracy 80.02%
Sensitivity 79.23%
Specificity 80.50%

Precision – Recall:

Training Data

Accuracy 81.80%
Precision 75.71%
Recall 76.32%

Test Data

Accuracy 80.57%
Precision 74.87%
Recall 73.26%

CONCLUSION

TOP VARIABLE CONTRIBUTING TO CONVERSION:

- LEAD SOURCE:
 - Total Visits
 - Total Time Spent on Website
- Lead Origin:
 - Lead Add Form
- Lead source:
 - Direct traffic
 - Google
 - Organic search
 - Referral Sites

Last Activity:

- Do Not Email_Yes
- Last Activity_Email Bounced
- Olark chat conversation