SUMMARY

In this case study, an online education company named X Education wanted to improve its lead conversion rate. They had a high number of website visitors who browsed their courses, but only a small percentage of them converted into paying customers. The company wanted to identify the most promising leads, or "Hot Leads", so that their sales team could focus on converting them.

To achieve this, the company used lead scoring, a method for ranking and prioritizing leads based on their likelihood to convert. They developed a scoring model using data such as website activity, form fills, and referrals. The model was developed using logistic regression, which is a statistical method commonly used for binary classification problems.

We have split the data into 70:30, train – test split. After training the model on a large dataset, the company was able to generate lead scores for each potential lead. We got the accuracy of train set as 78.7%. And we got the sensitivity and specificity of the train data as 77.6% and 81.3% respectively. Then we have applied the same conditions on the test set. We got these numbers as the model evaluation. For test set, we get the accuracy as 80% and we got the sensitivity of the test set as 79% and we got the specificity as 81%. We then end our model with 13 columns and one constant.

They then used these scores to prioritize their sales efforts, focusing on the leads with the highest scores. The company saw a significant improvement in their lead conversion rate, as their sales team was able to focus on communicating with the most promising leads.

This case study highlights the importance of lead scoring in improving sales efficiency. By using a datadriven approach to prioritize leads, businesses can focus their efforts on the most promising prospects, resulting in a higher conversion rate and improved revenue. The use of logistic regression also demonstrates the power of statistical models in analyzing large amounts of data to generate valuable insights.