

## Summary-

An education company named X Education sells online courses to industry professionals. Every day many professionals who are interested in the courses land on their websites and browse for course-related pieces of information. The company advertises its courses on several websites and search engines like Google, etc. 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 out a form providing their email address or phone number, they are classified as a lead. Moreover, the company also gets leads through past referrals. Once these leads are acquired, employees from the sales team start making calls, writing emails, etc. Through this process, some leads get converted while most do not. The typical lead conversion rate at X education is around 30%. There are a lot of leads generated in the initial stage (top) but only a few of them come out as paying customers from the bottom. In the middle stage, you need to nurture the potential leads well (i.e. educating the leads about the product, constantly communicating, etc. ) in order to get a higher lead conversion. X Education has appointed you to help them select the most promising leads. The CEO, in particular, has given a ballpark of the target lead conversion rate to be around 80%.

Our job is to build a logistic regression model to find out the high conversation-generated lead sources and provide the company with fruitful solutions.

Also, keep in mind that if the company's requirement changes in the future so our model insights and solutions will handle these as well.

A few steps are being taken during the model creation journey walkthrough -

1. First, we read and understand the provided dataset carefully.
2. After that clean the unnecessary parts of the dataset.
3. Then make helpful data conversations and prepare the data for Model Building.
4. Build the final model Building after a few train model analyses.
5. Get the needful insights from the model Evaluation.
6. Making Predictions depends upon our insights get through the model analysis.

After the model evolution, we get the cutoff of 0.41, an accuracy of 82%, a Precision of 74%, and a Recall of 76%.

There are a lot of leads generated in between the initial stage but only a few of them come out as paying customers from the data. In the middle stage, we need to manage the potential leads well to get a higher lead conversion. First, sort out the most effective ways from the leads like 'TotalVisits', 'Total Time Spent on Website', and 'Page Views Per Visit', those contribution is the most towards the probability of a lead getting converted. Then, we must keep a list of leads handily so that companies sell persons can inform them about new courses, services, job offers, and future higher studies. Carefully provide all available job offerings, information, and course information that suits best the interest of the leads. Focus on converted leads. Arrange question-answer sessions with the interested leads to extract the right information company need about them. Make further inquiries and appointments which determine leads' intention and mentality to join online courses.