

Lead Scoring Case Study – X Education

Introduction:

X Education, a leading EdTech company, strategically poised to tap into the increasing demand for online courses for industry professionals. This study aims to leverage Indian & global demand, enhancing X Education global digital presence by improving their conversion rate to >80% as against ~40% as of today.

Analysis:

The model building and prediction is being done for X Education in order to find ways to convert potential Lead. We will further understand and validate the data to reach a conclusion to target the correct group and increase overall conversion rate.

- A quick check on the data resulted in removal of columns with >40%
- Some of the columns had NULLs which needed to be imputed to participate in the model building/ analysis
- There were few columns which were treated for outliers
- The Standardize scaling technique was used to standardize numeric columns
- All the columns representing binary values were converted to 0 or 1
- Remaining categorical variables were converted into Dummy in preparation for the model building
- With RFE & augmented with manual feature selection, we finalized 21 features for the model building
- Those 21 features were further optimized based on p-Value & VIF cutoffs
- There is a clear gain in model performance when we shifted to 0.4 from 0.5 as the probability cut-off
- As we observe, there is a slight increase in the False Positive Rate, which in the case of Leads are ok to have a greater number of leads classified for conversion.
- We also observe the False Negatives have significantly gone down which has subsequently improved the model to detect higher number of conversions in the data
- The model predicted 0.926 (Sensitivity) which is a great number for the model in its ability to detect total conversions over actual number of conversions
- The model has proven to be generalized and performed very well on the training data set with overall accuracy of 92.66 & on test (unseen) data set with overall accuracy of 92.85

Conclusion:

- X Education must focus on data pertaining to Tags, Current Occupation & Last Activity details to be effective on the conversion
- Target Leads who are working professionals & would be looking for upskilling for their next role & they are the ones who could respond to phone calls when X Education plans for aggressive lead conversion.
- Plan to convert Students & other Unemployed groups during other period in the year as they usually tend to take more time to respond
- Ensure SMS communications are closely monitored