

**SUMMARY:**

Introduction X Education sells online courses to industry professionals. It markets its courses on different channels and do secure lot of leads. Unfortunately, though, their respective lead conversion rate is around 30%, which is a low turnaround. The company requires to build a regression model to help identify hot leads and clients who have higher chance of Conversion. CEO's target for lead conversion rate is around 80%.

**Model:**

1. The logistic regression Model that was built, achieved a good 90% accuracy, with similar numbers in Specificity and Sensitivity, hence exceeding CEO's expectations of 80%.
2. Models performed as
  - a. Accuracy: 92%
  - b. Sensitivity: 90%
  - c. Specificity: 93%
  - d. Precision: 87%
  - e. Recall: 90%
3. These stats on train and test data were close and hence shows a good model as an outcome.

**Recommendations and Observations:**

1. There are a quite a number of leads in the initial stage but only a few of them are converted into paying clients for the X company.
2. The most numbers of leads are from INDIA and in terms of city highest number are from Mumbai. Hence X Ed company can focus on expanding its footprint in other metropolitan cities in India like Delhi, Chennai etc. They can also consider their presence in other countries.
3. Working professionals and especially those in Management style profiles to be aggressively targeted as they have high conversion rate and may be financially better off to afford to high fees.
4. Clients those who spend a lot of time on the website and visit the site more often, could be hot leads.
5. Clients who respond to the SMS and part in Olark Chat conversations have high conversion rate.
6. Hence the company should focus on making the website more interactive, user friendly with good Chat features.
7. 'Reference' also has high lead rate and thus incentives or discounts for providing reference that convert to lead, should be offered.