# Lead-Scoring-Case-Study

**# Problem Statement:**

X Education, an online education company, faces challenges with its lead conversion process despite generating numerous leads daily. With a typical lead conversion rate of only 30%, they aim to boost efficiency by identifying the most promising leads, termed 'Hot Leads', to focus their sales efforts effectively.

Their lead conversion process resembles a funnel, where many leads enter but only a few become paying customers. Effective nurturing of potential leads in the middle stage is crucial for higher conversion rates.

To address this issue, X Education seeks assistance in developing a lead scoring model. This model should assign a lead score to each lead, indicating their likelihood of converting into paying customers. The objective is to prioritize leads with higher scores for focused sales efforts, aiming to achieve a target lead conversion rate of 80%.

In summary, X Education desires a model that can accurately predict lead conversion probabilities, facilitating targeted sales strategies and improving overall conversion rates.

# To build a lead scoring model for X Education, one can follow these steps:

1.Data Loading

2.Data Exploration (EDA)

3.Preprocessing

4.Feature Engineering

5.Outlier Analysis

6.Splitting Data into Train and Test Set

7.Model Building

8.Model Performance Benchmarking

9.Model Performance Evaluation

10.Cross Validation + Hyperparameter Tuning

11.Model Diagnosis Using Probability Calibration, ROC AUC Curve, Precision-Recall Curve

12.Making Predictions

13.Prediction on Test Set

14.Precision-Recall

By following these steps, X Education can develop a robust lead scoring system that helps prioritize leads with the highest conversion potential, ultimately improving the efficiency of their sales process.