# Lead Scoring Case Study

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#### **Problem Statement**

- X Education is an online course provider for industry professionals.
- Professionals visit their website, browse courses, and fill out a form, which records them as leads.
- The sales team contacts these leads via calls and emails to convert them into customers.
- The current lead conversion rate is around 30%, meaning only 30 out of 100 leads convert into paying customers.
- To improve efficiency, X Education wants to identify the most promising leads, referred to as "Hot Leads."
- By focusing on Hot Leads, the sales team can prioritize communication with high-potential leads.
- This strategy aims to increase the conversion rate and reduce time spent on low-potential leads.

# **Business Objective**

• Lead X has tasked us with building a model that assigns each lead a score between 0 and 100. This will help them identify "Hot Leads" and improve their conversion rate.

- The CEO aims to increase the lead conversion rate to 80%.
- The model should be flexible enough to handle future constraints, such as:
- Actions required during peak times.
- - Optimal utilization of the full workforce.
- Post-target strategies and approaches once the conversion goal is achieved.

## Problem Approach

- Importing the data and inspecting the
- data frame
- Data preparation
- EDA
- Problem
- Approach
- Dummy variable creation
- Model Evaluation
- Making predictions on test set

## **Observations**

- Train Data:
- Accuracy: 80%
- Sensitivity: 77%
- Specificity: 80%
- Test Data:
- Accuracy: 80%
- Sensitivity: 77%
- Specificity: 80%
- Final Features list:
- Lead Source\_Olark Chat
- Specialization\_Others
- Lead Origin\_Lead Add Form
- Lead Source\_Welingak Website
- Total Time Spent on Website
- Lead Origin\_Landing Page Submission
- What is your current occupation\_Working Professionals
- Do Not Email

### Conclusion

- The conversion rate for leads originating from API and Landing Page Submission is around 30-35%, which is close to the average. However, conversion rates are significantly lower for leads from Lead Add Form and Lead Import. Therefore, the focus should be on leads from API and Landing Page Submission for better results.
- The majority of leads are generated through Google or direct traffic, but the highest conversion rates come from referral sources and the Welingak website.
- Leads who spend more time on the website are more likely to convert.
- The most common last activity for leads is "Email Opened," while the highest conversion rate is seen in leads where "SMS Sent" was the last activity.
- A large portion of leads are unemployed, but the highest conversion rates are among working professionals.