## **Business Context**

X Education sells online courses to industry professionals. The company markets its courses on several websites and search engines like Google. Once these people land on the website, they might browse the courses or fill up a form for the course or watch some videos. If they successfully identify this set of leads, the lead conversion rate should go up as the sales team will now be focusing more on communicating with the potential leads rather than making calls to everyone.

## Problem Statement

An education company named X Education sells online courses to industry professionals. On any given day, many professionals who are interested in the courses land on their website and browse for courses.

- The company gets a lot of leads and its lead conversion rate is very poor. To make this process more efficient, the company wishes to identify the most potential leads, also known as 'Hot Leads'. [SEP]
- If they successfully identify this set of leads, the lead conversion rate should go up as the sales team will be now focusing more on communicating with potential lead or hot leads rather than calling everyone.

## Solution Approach

Developing a classification logistic regression model to assign a lead score between 0 and 100 to each of the leads which can be used by the company to target potential leads. A higher score would mean that the lead is hot, i.e. is most likely to convert whereas a lower score would mean that the lead is cold and will mostly not get converted.

## Improvements to the Solution

Model could be reassessed to give more sensitivity that means to be more accurate with predicting for all those who will convert (true positive value) and when specificity is induced more, meaning more False Positive occurrence that will be acceptable because company has manpower to go after some false positive leads.

If the company lacks resources then the model could be assessed in a way that it gives more specificity, so that dead lead can be avoided, saving resources.