

Leads-Scoring-Case-Study

Project Objective

This Lead scoring project for a course content development organization will help them with less time wastage over the poor conversion score. This Project will benefit the Marketing and sales team focus on the most prominent conversion of a lead by scoring it from 0 to 1. A lead with lead score of Zero (0) are least likely to go for a course and hence it is better to not waste much time calling or following up with them. While a lead with lead score of near to 1 are more likely to be converted and hence a campaign and sales team can invest time on their conversion. The main aims of this Machine Learning project are:

1. To build a model wherein we can assign a lead score to each of the leads such that the customers with higher lead score have a higher conversion chance and the customers with lower lead score have a lower conversion chance.
2. A Model with at least 80% efficient leads (conversion rate ~ 80%) can be deployed and used for tracking the leads by the organization.

Online Course Sells and Support Business Understanding

Online Course Leads Business

The online courses company sells online courses to industry professionals. On any given day, many professionals who are interested in the courses land on their website through various websites and search engines to browse for the courses.

Once a person lands on the website, they might indulge in various activities like browsing the courses or filling up a form for the course or watch some videos. When a person fills up a form providing their email address or phone number, they are classified to be a **Lead**.

Once a visit has been converted into lead, the sales team starts communicating with them to get them converted into buying their courses. From the past experience, the typical lead conversion rate at *X education* is noted to be around 30%.

To improve the conversion rate and hence making the sales team more efficient, the company is intended to identify the most potential leads, as **Hot Leads**. With this, the sales team can focus more on conversion of a potential customer rather than wasting time on those whose chances of conversion is very less.

Working of Lead Conversion Process

An ideal lead conversion process to be followed at X-education is completed in multiple steps:

1. Social Media Marketing pulls the visitors on the website
2. The Visitor fills the form with their contact and interest details
3. Sales team collects the initial pool of the data
4. **Lead Nurturing (Identify the Hot Leads after educating them about the products and benefits)**

5. Lead Conversion

Here, as we progress in the stages we are left only with concrete leads, which have higher chances of getting converted. Since, we are already given with the lead pool, **the main focus of our case study will revolve around the Lead Nurturing / Hot Leads Identification.**



Project Goal

With this Case study, we will try:

1. Build a 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 means higher chances of getting converted and vice-versa.
2. Identify the challenges and strategy to overcome them. The model should be self-adjusting to identify such challenges and overcome them as and when required in the future.
3. Present the recommendations to better on identification and conversion on their merit.

Approach

The complete project is done in following main steps.

1. Read and analysed the data
2. Data Cleaning

3. Data Analysis
4. Data Preparation - Creating Dummies
5. Correlation Check
6. Test-Train Split
7. Rescaling the features with MinMax Scaling
8. Model Building
9. Model Testing and Evaluation based on various Parameters

A well-documented Jupiter Notebook is attached to explain the stages in more elaborated way.
Further, the complete approach is well documented in **X Education Lead Score Case Study Summary**.