

# Lead Scoring Case Study

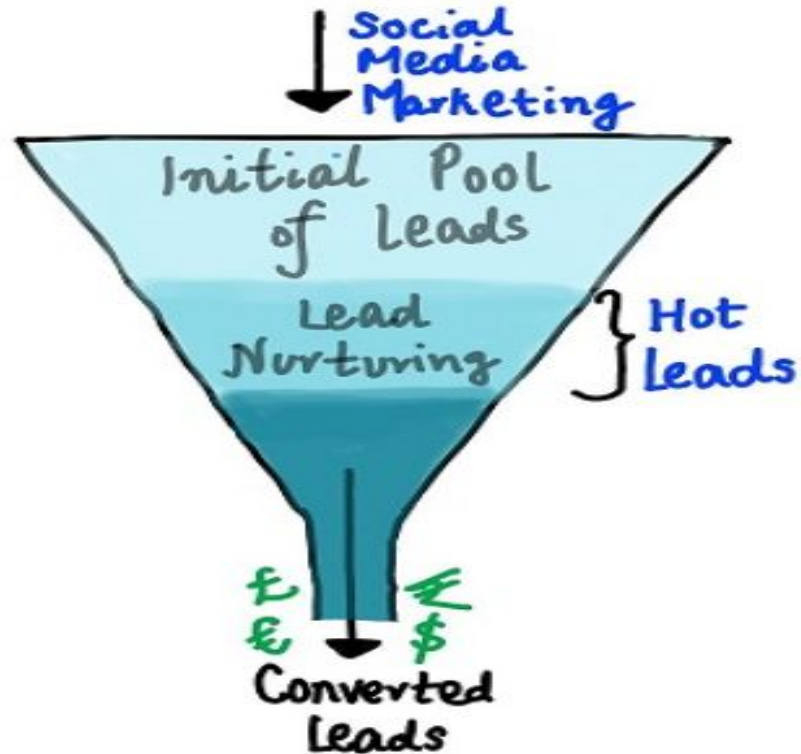
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# Problem Statement

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.

X Education gets a lot of leads, its lead conversion rate is very poor. For example, if, say, they acquire 100 leads in a day, only about 30 of them are converted. To make this process more efficient, the company wishes to identify the most potential leads, also known as 'Hot Leads'. 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 Cont.



Lead Conversion Process - Demonstrated as a funnel

# Business Goal

X Education needs help in selecting the most promising leads, i.e. the leads that are most likely to convert into paying customers.

The company needs a model wherein you a lead score is assigned 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.

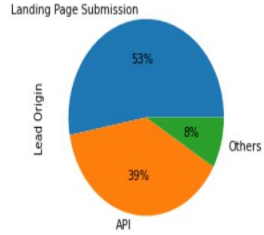
The CEO, in particular, has given a ballpark of the target lead conversion rate to be around 80%.

# Strategy

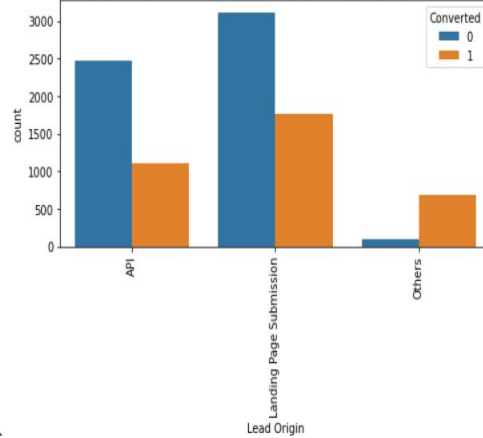
- ❖ Data Collection
- ❖ Data Understanding
- ❖ Data Cleaning
- ❖ Performing Exploratory analysis
- ❖ Dummy Variable creation
- ❖ Train and Test data prep
- ❖ Scaling
- ❖ Model Building
- ❖ Evaluation
- ❖ Prediction on Test Data set

# Data Exploratory Analysis

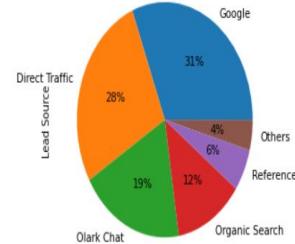
Plotting data for the column: Lead Origin



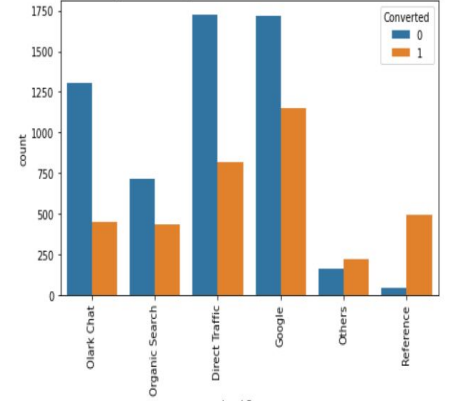
Plotting data for target in terms of total count for: Lead Origin



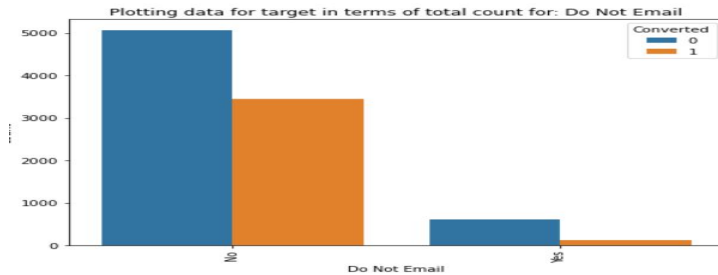
Plotting data for the column: Lead Source



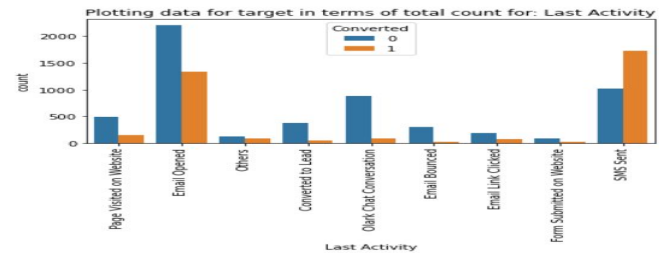
Plotting data for target in terms of total count for: Lead Source



Plotting data for target in terms of percentage for: Lead Origin



Plotting data for target in terms of percentage for: Lead Source



# Model Results

	coef	std err	z	P> z	[0.025	0.975]
<b>const</b>	-1.9592	0.104	-18.917	0.000	-2.162	-1.756
<b>Do Not Email</b>	-1.5326	0.179	-8.585	0.000	-1.882	-1.183
<b>TotalVisits</b>	8.2956	2.525	3.285	0.001	3.347	13.245
<b>Total Time Spent on Website</b>	4.8491	0.174	27.938	0.000	4.509	5.189
<b>Page Views Per Visit</b>	-3.6761	1.313	-2.800	0.005	-6.249	-1.103
<b>Lead Origin_Others</b>	3.3650	0.171	19.702	0.000	3.030	3.700
<b>Lead Source_Olark Chat</b>	1.3652	0.122	11.232	0.000	1.127	1.603
<b>Last Activity_SMS Sent</b>	1.2852	0.076	16.903	0.000	1.136	1.434
<b>What is your current occupation_Not provided</b>	-1.2714	0.088	-14.395	0.000	-1.445	-1.098
<b>What is your current occupation_Working Professional</b>	2.6080	0.194	13.441	0.000	2.228	2.988
<b>Last Notable Activity_Modified</b>	-0.8740	0.079	-11.009	0.000	-1.030	-0.718
<b>Last Notable Activity_Olark Chat Conversation</b>	-1.4017	0.346	-4.047	0.000	-2.081	-0.723
<b>Last Notable Activity_Others</b>	1.3310	0.269	4.955	0.000	0.805	1.857

- After building 4 model we got final model with above metrics.

