1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?

**Answer:**

**Lead Origin, Lead Profile & Occupation** are the top the 3 variables that contribute most towards the probability of a lead getting converted as these featured in all the 3 models built and have high positive beta co-efficient values.

1. What are the top 3 categorical/dummy variables in the model which should be focused the most on in order to increase the probability of lead conversion?

**Answer:**

**Model Perspective**

Below are the variables of the model we chose to go with along with their beta co-efficient values:



Clearly, the variables with higher coefficients as highlighted in the above image are the top three categorical/dummy variables.

**Business Perspective**

The above variables make total business sense due to the below reasoning:

Lead Profile “Potential lead” as assigned by the person allotted to a particular lead itself says we should consider him/her as hot lead.

Occupation “Working professional” since the working professionals are the ones that look out for online courses than the students due to time constraints.

1. X Education has a period of 2 months every year during which they hire some interns. The sales team, in particular, has around 10 interns allotted to them. So during this phase, they wish to make the lead conversion more aggressive. So they want almost all of the potential leads (i.e. the customers who have been predicted as 1 by the model) to be converted and hence, want to make phone calls to as much of such people as possible. Suggest a good strategy they should employ at this stage.

**Answer:**

The cut-off threshold for conversion probability need to be brought down so that the **Sensitivity** (True Positive Rate) value increases thereby providing a higher number of Hot Leads to be followed up on. The flip side of this, ideally, is that the False Positive Rate (1 – Specificity) increases which means that some Hot Leads predicted by the model may not actually be the Hot ones. We are ok to take this tradeoff in this specific case since we can afford to have more people following up for conversion.

1. Similarly, at times, the company reaches its target for a quarter before the deadline. During this time, the company wants the sales team to focus on some new work as well. So during this time, the company’s aim is to not make phone calls unless it’s extremely necessary, i.e. they want to minimize the rate of useless phone calls. Suggest a strategy they should employ at this stage.

**Answer:**

The cut-off threshold for conversion probability need to be increased so that the False Positive Rate (1 - **Specificity**) value decreases thereby providing a lower number of Hot Leads to be followed up on thereby reducing the need for sales agents to make a greater number of calls which is exactly what is needed in this specific case.