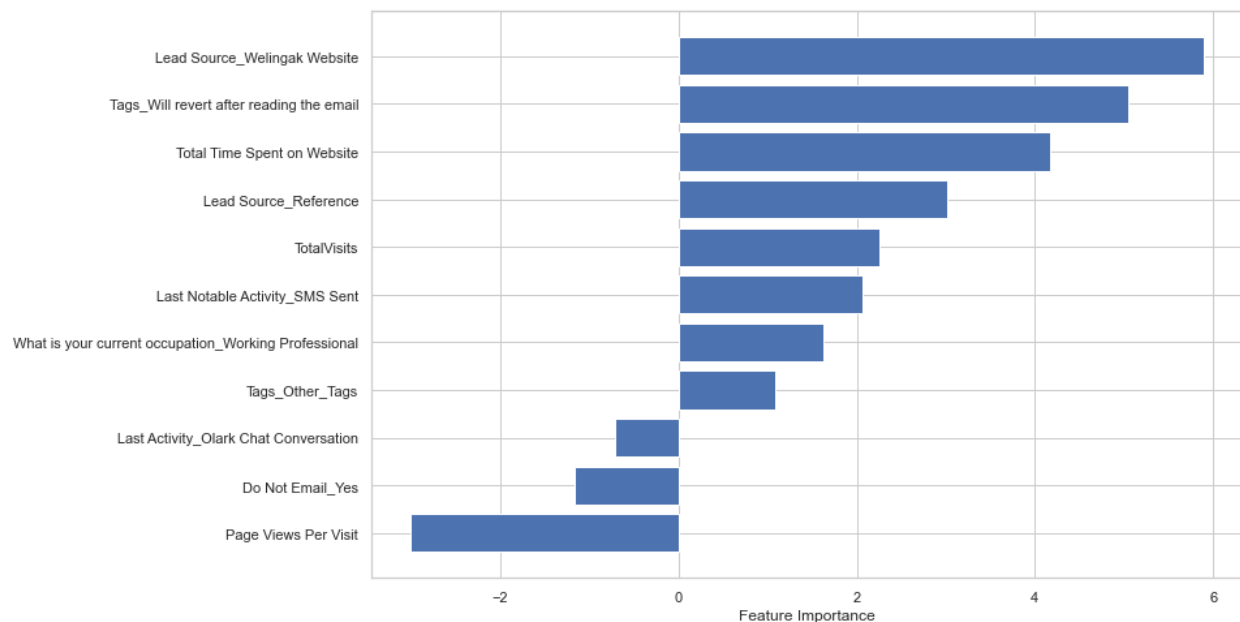


1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?

Ans:



The top variables are Lead Source\_Welingak Website, Tags\_Will revert after reading the email and Total Time spent on website.

2. 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?

Ans: Using the above graph, we can see that the categorical variables that have positive impact on lead conversion are: Lead Source\_Welingak Website, Tags\_Will revert after reading the email and Lead source\_reference.

3. 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.

Ans: During this time, the company has the required resources (employees) to make as many phone calls as possible. This means that our model needs to be able to classify all potential leads correctly and even if it misclassifies some negative leads as positive, it should be fine. This metric is identified by the model's sensitivity (True positives/True positives + False negatives). During this time, a model with high sensitivity is useful for the company, which can be simply achieved by choosing a lower cutoff value. A lower cutoff will classify more leads as

positive. However, we will have to keep in mind that if this value is not too low, otherwise our model is going to classify almost every lead as a positive one (which is as good as nothing).

4. 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.

Ans: Since the target is reached and the company wants to reduce unnecessary calls, our model needs to be changed slightly. By increasing the model's specificity (True negatives/True negatives + False positives), we can reduce the number of leads that the model classifies as positive. Intuitively, this can be achieved by increasing the cutoff. A higher cutoff means the more leads with a lower probability of conversion will simply be marked as a "cold" lead.