**ASSIGNMENT QUESTIONS**

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

Following are the top three variables which contribute most towards the probability of a lead getting converted:

* Tags\_Closed by Horizzon: Leads that have been assigned Tags as ‘closed by horizon’ have the highest probability of conversion.
* Tags\_Lost: Leads that have been tagged as ‘Lost ‘also contribute to the conversion to a considerable extent.
* Tags\_Will revert after reading the email: Leads that have been tagged as ‘will revert after reading the mail’ also have significant correlation with the conversion.

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?**

Following are the top 3 categorical/ dummy variables that should be focused the most on in order to increase the probability of lead conversion:

* Tags\_Lost to EINS
* Tags\_Closed by Horizzon
* Tags\_Will revert after reading the email

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.**

The company has two months in its hands and has also dedicated 10 interns for this work. It has ample amount of time & resources with it so it should make an effort to reach `all the potential leads` but should also focus more on leads who have low probability of conversion to improve the overall lead conversion rate. Focusing more on leads showing lower conversion rate will help in improving overall conversion. Following is the list of variables & its correlation with Lead conversion:

| Sr. No. | Variables | Correlation with Lead conversion |
| --- | --- | --- |
| 1 | Tags\_Will revert after reading the email | 0.65 |
| 2 | Total Time spent on Website | 0.35 |
| 3 | Last Activity\_SMS Sent | 0.34 |
| 4 | Lead Origin\_Lead Add Form | 0.31 |
| 5 | Tags\_Closed by Horizzon | 0.23 |
| 6 | Tags\_Lost | 0.16 |
| 7 | Lead Source\_Welingak Website | 0.15 |
| 8 | Last Notable Activity\_Olark Chat Conversation | -0.074 |
| 9 | Tags\_No phone number | -0.108 |
| 10 | Lead Source\_Olark Chat | -0.124 |
| 11 | Last Activity\_Email Bounced | -0127 |
| 12 | Tags\_Others | -0.204 |
| 13 | Last Notable Activit\_Modified | -0.263 |

From the above table we can see that the company needs to focus on the first seven variables present on the table with the positive Correlation with Lead 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.**

In this condition they need to focus more on other methods like automated emails and SMS. This way calling won’t be required unless it is an emergency. The above strategy can be used but with the customers that have a very high chance of buying the course or the other strategy could be during the quarter before the deadline, the company has very less time in its hand. So it is of utmost importance that it concentrates more on hot leads that have the highest lead conversion rate. They should avoid useless calls and prioritize the leads. Prioritizing can be done on the basis of lead score. Leads that have more than 80% of lead score can be targeted.