

Lead Scoring Subjective Questions and their Answers

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

From the coefficient of different variables, it is clear below are the top three variables which contribute most:

```
: #Just showing the coefficients of the model once again
res.params.sort_values(ascending=False)

: Tags_Closed by Horizzon          9.185126
  Tags_Lost to EINS                8.030392
  Tags_Will revert after reading the email  7.315227
  Source_Welingak Website          4.167272
  Tags_Busy                        3.198717
  Tags_Not Specified              2.802010
  Last_Activity_SMS Sent           1.663369
  Source_Reference                 1.576688
  Specialization_Not Applicable    1.412395
  Source_Olark Chat               1.198920
  Total Time Spent on Website      1.051871
  Tags_Ringing                    -0.973265
  Do Not Email                    -0.988060
  Last_Notable_Activity_Modified   -1.699064
  const                          -4.255403
dtype: float64
```

- 1) Tags given top the customers.
 - a) Customers having tags as 'Closed by Horizzon' (coefficient value of 9.185126)
 - b) Customers having tags as 'Lost to EINS' (coefficient value of 8.030392)
 - c) Customers having tags as 'Will revert after reading the email' (coefficient value of 7.315227)
- 2) Last Activity of the customers.
- 3) Lead Source of the customers.

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?

From the coefficient of different variables & below snapshot, it is clear below are the top three variables which contribute most:

```
: #Just showing the coefficients of the model once again
```

```
res.params.sort_values(ascending=False)
```

```
: Tags_Closed by Horizzon          9.185126
  Tags_Lost to EINS                8.030392
  Tags_Will revert after reading the email  7.315227
  Source_Welingak Website          4.167272
  Tags_Busy                        3.198717
  Tags_Not Specified               2.802010
  Last_Activity_SMS Sent           1.663369
  Source_Reference                  1.576688
  Specialization_Not Applicable     1.412395
  Source_Olark Chat                1.198920
  Total Time Spent on Website       1.051871
  Tags_Ringing                     -0.973265
  Do Not Email                     -0.988060
  Last_Notable_Activity_Modified    -1.699064
  const                           -4.255403
dtype: float64
```

- 1) Tags_Closed by Horizzon: 9.185126
- 2) Tags_Lost to EINS: 8.030392
- 3) Tags_Will revert after reading the email: 7.315227

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.**

In order to capitalize the period of two months with the 10 interns, X Education need to create a good strategy to convert the hot leads. Please find below a few suggestions regarding the same:

- As we are going to be relying on interns who have low experience, we can have them focus on leads with a very high chance of converting i.e., leads with features which are contributing the most to the model (for example, ones with tag 'Closed by Horizzon' or 'Lost to EINS'). This will allow the regular employees of the company to focus on leads where more effort and experience would be required
- For similar reason, we should try to avoid giving interns the leads where one or more of the following features are available so as to not give them difficult leads:
 - Ones with the tag as 'Ringing'
 - Ones where customer has opted not to be reached via email
 - Ones where the last notable activity has been listed as 'Modified'
- We are looking at this strategy for a period of 2 months so we can potentially break this into multiple checkpoints and make a few decisions based on the performance. For e.g.:

- If the performance of the team is really good and we feel that we will attain targets in advance, we can lower the cutoff for conversion which will then allow sales team to reach out to more potential customers
- If the performance from interns is good, we can give them slightly difficult leads to enhance their learning

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.

In order to limit the calls the team makes during this period, a few suggestions regarding the strategy are as follows:

- Mainly, we can focus more on leads having high conversion scores.
- Moreover, we can change the cutoff for the target variable from 0.4 (i.e., 40%) to a high probability so that the hot leads provided to the sales team is limited to only the ones with extremely high chance of being converted.
- Additionally, the sales team can find other avenues via automated e-mail, SMS to reach out to the customers instead of personally reaching out via phone calls. This will free up their time for new work.