**LOGISTIC REGRESSIONAssignment**

**Subjective Questions**

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| **1.** | **Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?** |
| **Ans.:** | The top three variables in our model which contribute most towards the probability of a lead getting converted is: -   * Occupation\_Working Professional * Lead Origin\_Lead Add Form and Lead Source\_Olark Chat * Last Notable Activity SMS Sent |
| **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.:** | The top three categorical variables in our model which should be focused the most in order to increase the probability of lead conversion is: -   * Lead Origin\_Lead Add Form * Occupation\_Working Professional * Last Notable Activity\_SMS Sent |
| **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.:** | Following strategy can be adopted for converting maximum leads: -   * Leads who are investing more time on visiting the website are more likely to convert. * Leads received from sources like Olark Chat, Reference are most likely to converted. Hence Interns can invest time more to explore leads provided by these sources. * Leads which are tagged as they will revert after reading the email are having very high potential of converting. Hence these users can be regularly followed up. * Leads who are unemployed or working professional have high chances of getting converted. Hence these users can be regularly followed up * Leads which have SMS sent as a notable activity are more likely to convert. * Finally in the model we can reduce the threshold of probability from 0.42 to get the more leads being predicted as 1 and the interns can target those leads whose lead score is below 42 and convince them for being converted. |
| **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.:** | Following strategy can be adopted for reducing the useless phone calls: -   * Unemployed people might not get converted due to budget constraints. Hence, they should be avoided. * Finally in the model we can increase the threshold of probability from 0.42 to get the less leads being predicted as 1 and hence provide such leads which are on brink of getting converted. |

***Logistic Regression Assignment***

***Subjective Questions and Answers***

**Submitted by-**

**ANKITA SAHA RAY & VAIBHAV BHARGAVA**

**(DS-C42)**