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

The top 3 variables contributing the most towards the probability of a particular lead getting converted are:

Generalized Linear Model Regression Results

Dep. Variable:	Converted	No. Observations:	6468
Model:	GLM	Df Residuals:	6454
Model Family:	Binomial	Df Model:	13
Link Function:	logit	Scale:	1.0000
Method:	IRLS	Log-Likelihood:	-2862.5
Date:	Sat, 08 Jan 2022	Deviance:	5725.0
Time:	18:32:58	Pearson chi2:	7.75e+03
No. Iterations:	7		
Covariance Type:	nonrobust		

	coef	std err	z	P>|z|	[0.025	0.975]
const	-1.0717	0.134	-7.968	0.000	-1.335	-0.808
Total Time Spent on Website	4.3814	0.155	28.234	0.000	4.077	4.686
Lead Origin_Landing Page Submission	-0.5766	0.130	-4.442	0.000	-0.831	-0.322
Lead Origin_Lead Add Form	3.2788	0.214	15.350	0.000	2.860	3.697
Lead Source_Direct Traffic	-0.3161	0.085	-3.732	0.000	-0.482	-0.150
Lead Source_Olark Chat	0.9169	0.118	7.790	0.000	0.686	1.148
Lead Source_Referral Sites	-0.7325	0.353	-2.072	0.038	-1.425	-0.040
Lead Source_Welingak Website	3.1196	1.027	3.037	0.002	1.106	5.133
Do Not Email_Yes	-1.2998	0.159	-8.183	0.000	-1.611	-0.989
Specialization_Select	-0.6892	0.123	-5.594	0.000	-0.931	-0.448
Specialization_not provided	-0.9347	0.178	-5.240	0.000	-1.284	-0.585
What is your current occupation_Working Professional	2.3366	0.179	13.048	0.000	1.986	2.688
What is your current occupation_not provided	-1.1838	0.109	-10.876	0.000	-1.397	-0.970
TotalVisits	4.8465	1.937	2.501	0.012	1.049	8.644

- Total Visits
- Total time spent on the website
- Total Visits
- Leads originating in the form of adds.

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?

The top 3 categorical variables that can be focused on so as to increase the probability of a lead being converted are:

- Lead Origins
- Lead source
- Occupation

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.

To make sure that there is a surge in the number of people / potential leads that convert, the company X education can focus on variables such as the total time spent on the website, Total Visits, Leads originating from add form, working professionals, lead source being Welingak Website and Olark Chat. Variables such as leads originating from landing page submission, direct traffic, Specialization being Select, don't email being yes, Lead Source being Referral Sites, specializations and occupations that are not provided and the last notable activity that is modified have a significant negative impact on the leads being converted so the company needs to make sure that leads with these characteristics are not focused much on while making phone calls. The company can also look at the leads score to decide who must be considered/ pursued and who must not be so as to increase the lead conversion.

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.

The company can minimize the number of unsuccessful phone calls by focusing on customers who have spent the highest amount of time on their website and on customers who have visited the websites a lot. Working professionals can be focused on and the number of adds and SMS sent can be increased. Phone calls can be made just to those leads who have a lead score of 80 and above so that there are not many unsuccessful phone calls made and the number of customers also increase.