Summary report

Below is the summary of the model building exercise being done

Model(s)	Cross Val Score(Train)	cross Val score (Test)
Base Model	0.8118377866024025	0.8145460064759849
Model 2	0.8003434582478922	0.7983917970858069
Model 3	0.7951482185891201	0.7914145979492714
Model 4	0.7975099277027822	0.7950876956287102
Model 5	0.8126255598852661	0.8134504856988667
Model 6	0.8121531189403843	0.813815434430653
Model 7	0.8009733795077347	0.7987580949811118

Out of the 7 Models put together model 5 seems to be the best performing based on the cross validation score on the Train and test data.

Using RFE 25 features considered to be best performing Below are the list of 25 features

- 1. TotalVisits
- 2. Total Time Spent on Website
- 3. Page Views Per Visit
- 4. Lead Origin_API
- 5. Lead Origin_Landing Page Submission
- 6. Lead Origin_Lead Add Form
- 7. Lead Source_Olark Chat
- 8. Lead Source_Reference
- 9. Lead Source_Welingak Website
- 10. Do Not Email_No

- Last Activity_Approached upfront
- 12. Last Activity_Converted to Lead
- 13. Last Activity_Email Bounced
- 14. Last Activity_Had a Phone Conversation
- 15. Last Activity_Olark Chat Conversation
- 16. What is your current occupation_Housewife
- 17. What is your current occupation_Student
- 18. What is your current occupation_Unemployed
- What is your current occupation_Working Professional
- 20. Last Notable Activity_Email Link Clicked
- 21. Last Notable Activity_Email Opened
- 22. Last Notable Activity_Had a Phone Conversation
- 23. Last Notable Activity_Modified
- 24. Last Notable Activity_Olark Chat Conversation
- 25. Last Notable Activity_Page Visited on Website

CONCLUSION / SUMMARY

- Lead Origin and Lead source are key for getting the lead converted
- 2. Leads Originating from the below source
 - a. API
 - b. Landing Page Submission
 - c. Add form
- 3. Lead Sources coming from below
 - a. Olark chat

- b. Reference
- c. website
- 4. Company should consider to reach out leads from point 2 and 3 as they are potential leads to be converted
- 5. Below leads whose occupation are considered to be potential leads to be converted
 - a. unemployed
 - b. Student
 - c. house wife
 - d. working professional