

Lead Scoring Case Study

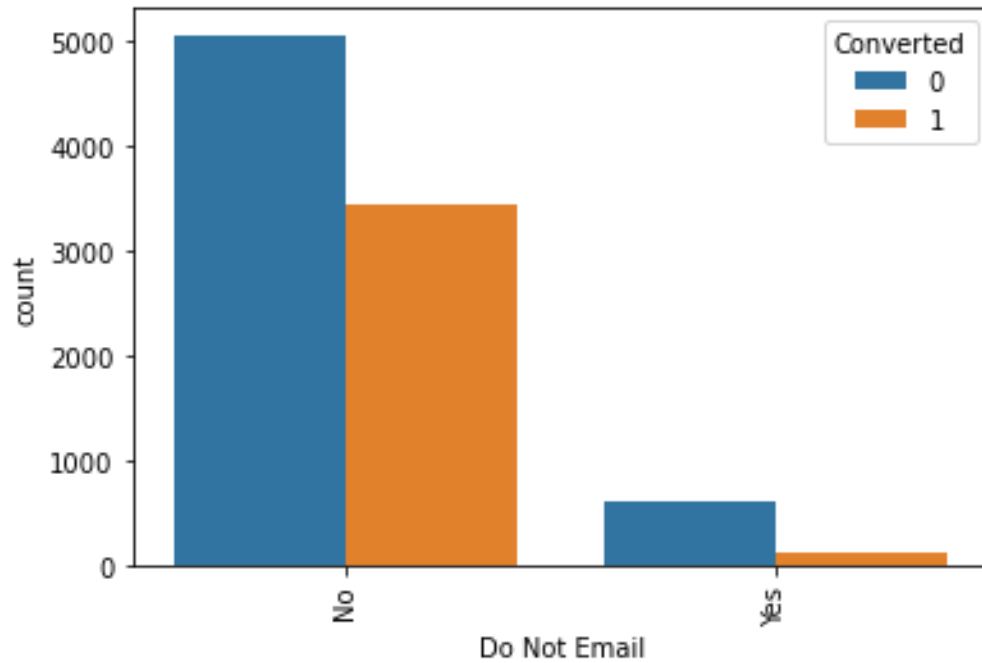
by:
Aditya Punjabi
Anurupa Sharma

BUSINESS GOAL

- The company requires a model to be built that the leads that are most likely to convert into paying customers.
- The company requires to be built a model wherein needs to assign a lead score to each of the leads such that the customers with higher lead scores have a higher conversion chance and the customers with lower lead scores have a lower conversion chance.
- The model to be built in lead conversion rate around 80% or more.

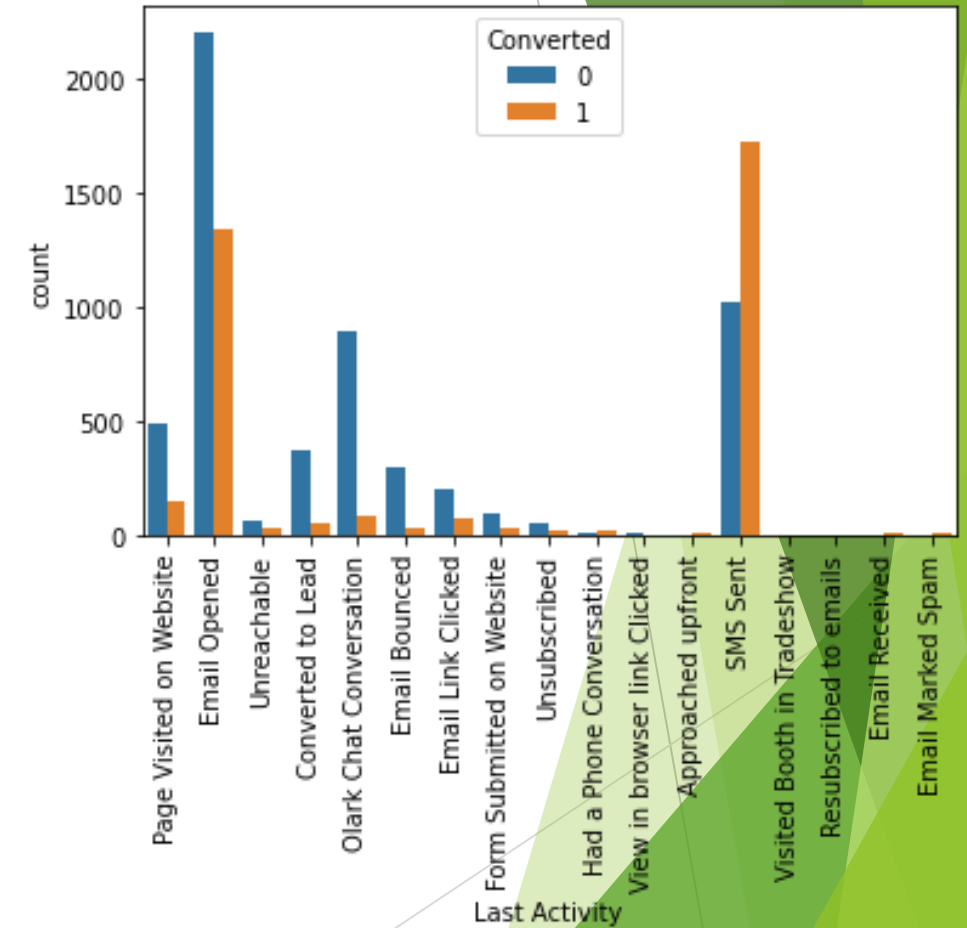
EXPLORATORY DATA ANALYSIS

DO NOT CALL VS CONVERTED



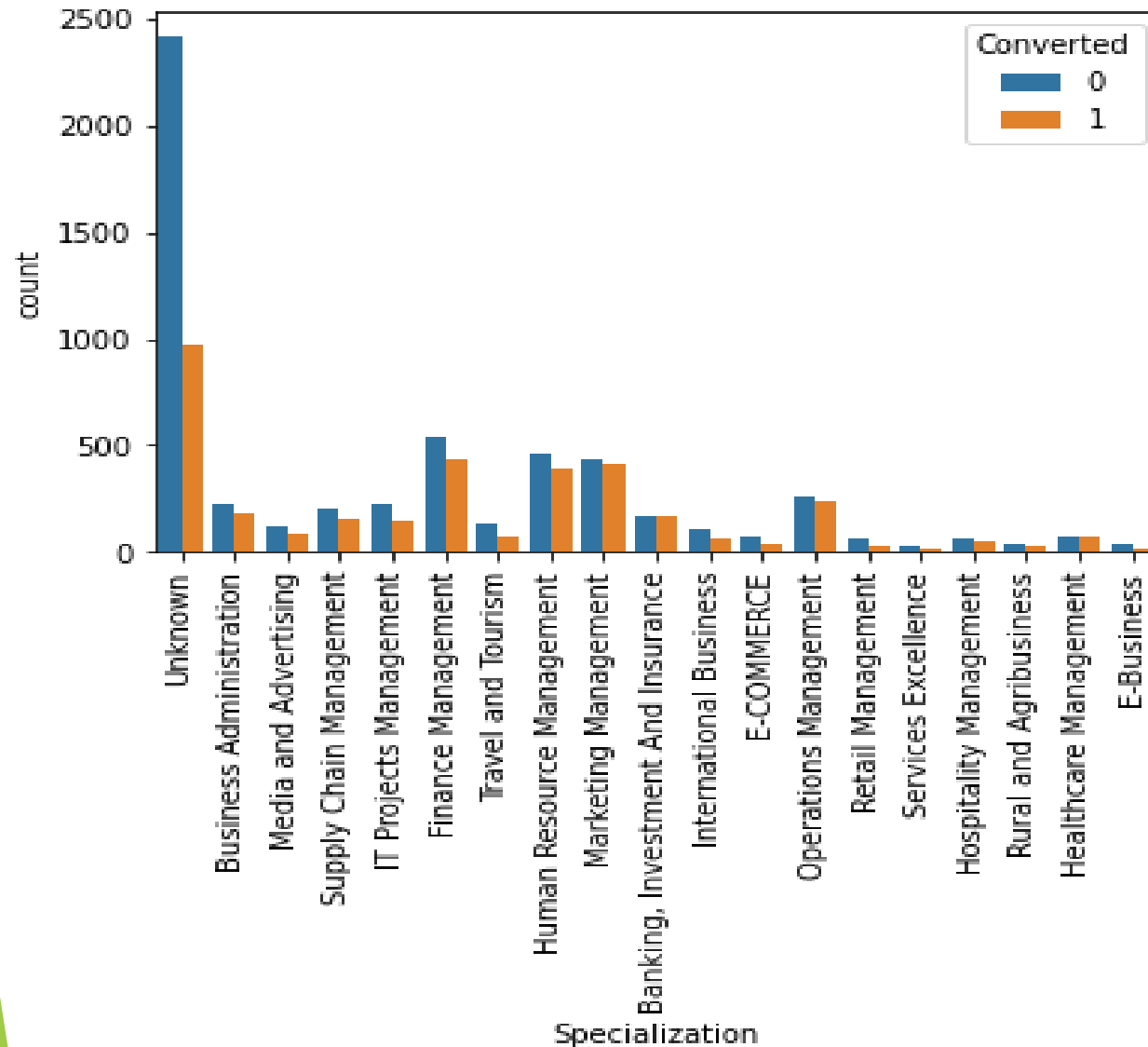
Most leads prefer not to inform through mail.

LAST ACTIVITY VS CONVERTED



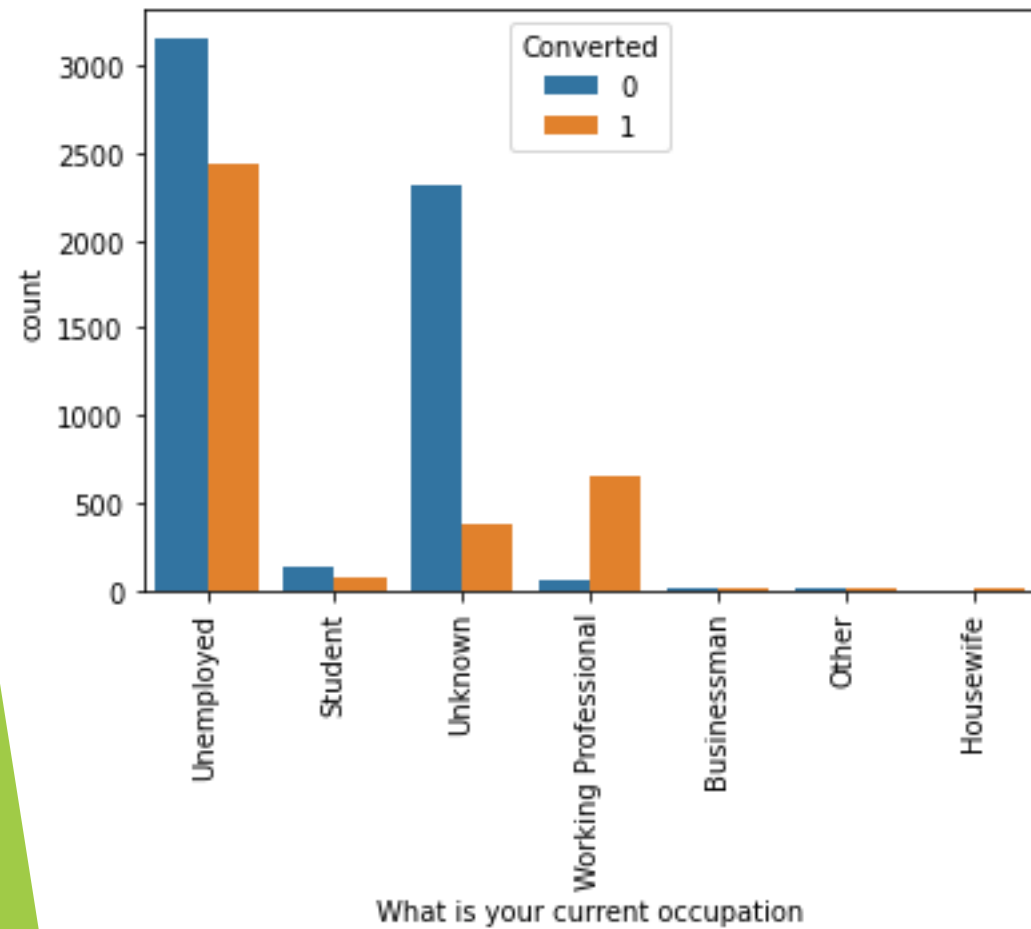
SMS and emails were shown to be promising methods for getting higher confirmed leads.

SPECIALIZATION VS CONVERTED



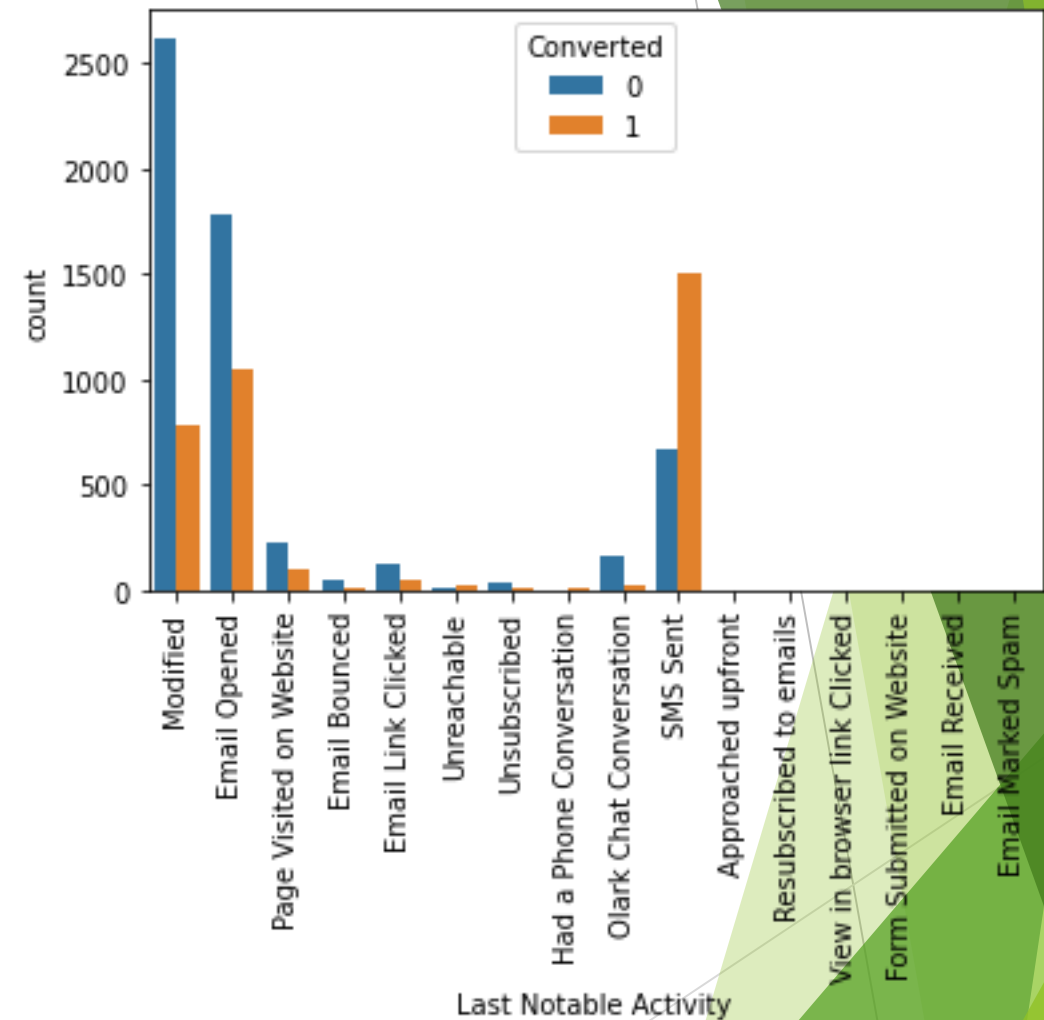
Most of the leads have no information about specialization. And Finance management, human resources management, marketing management have high conversion rates. People from these specializations can be promising leads.

WHAT IS YOUR CURRENT OCCUPATION VS CONVERTED



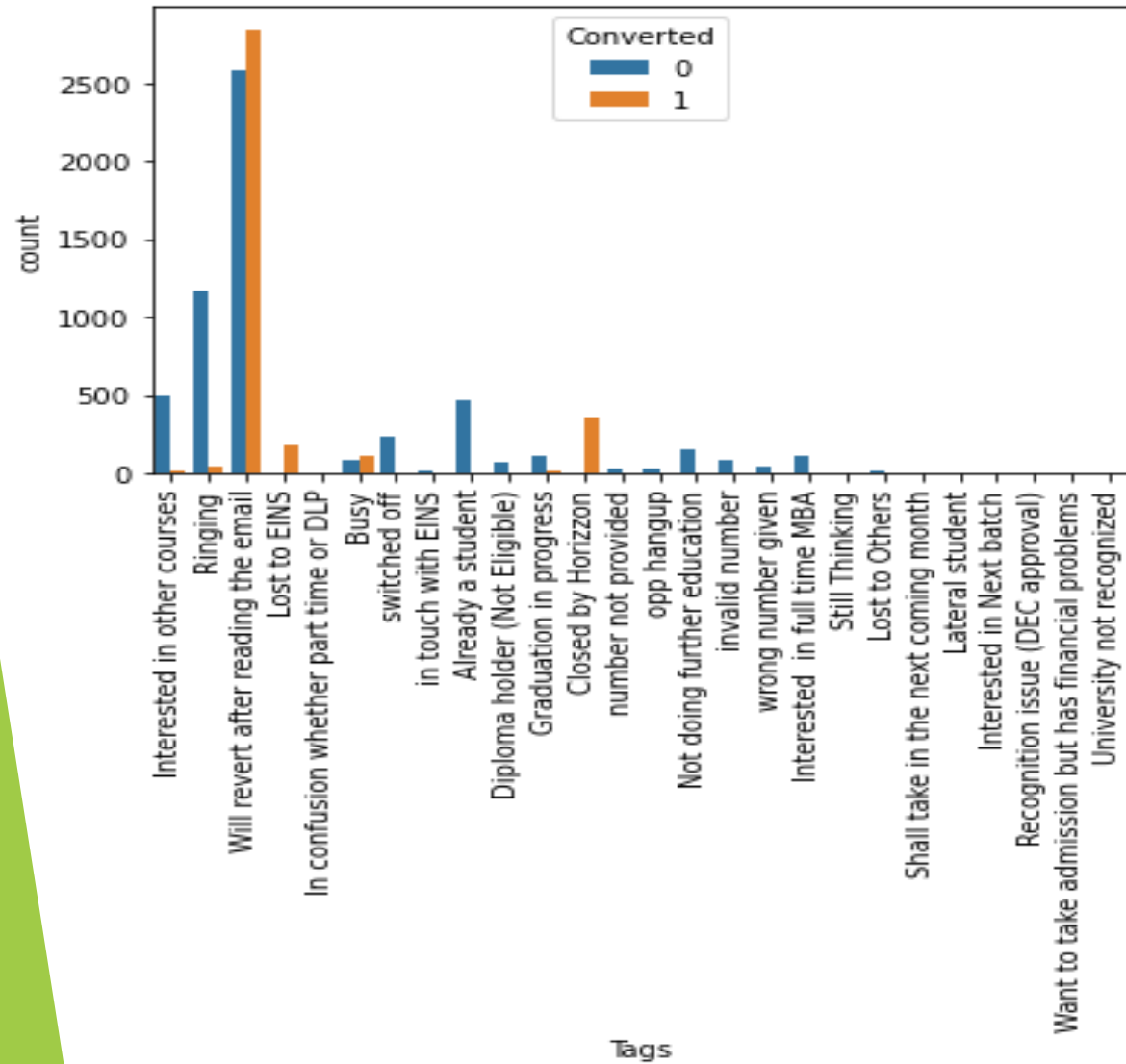
Working professional and Unemployed has highest conversion rate.

LAST NOTABLE ACTIVITY VS CONVERTED



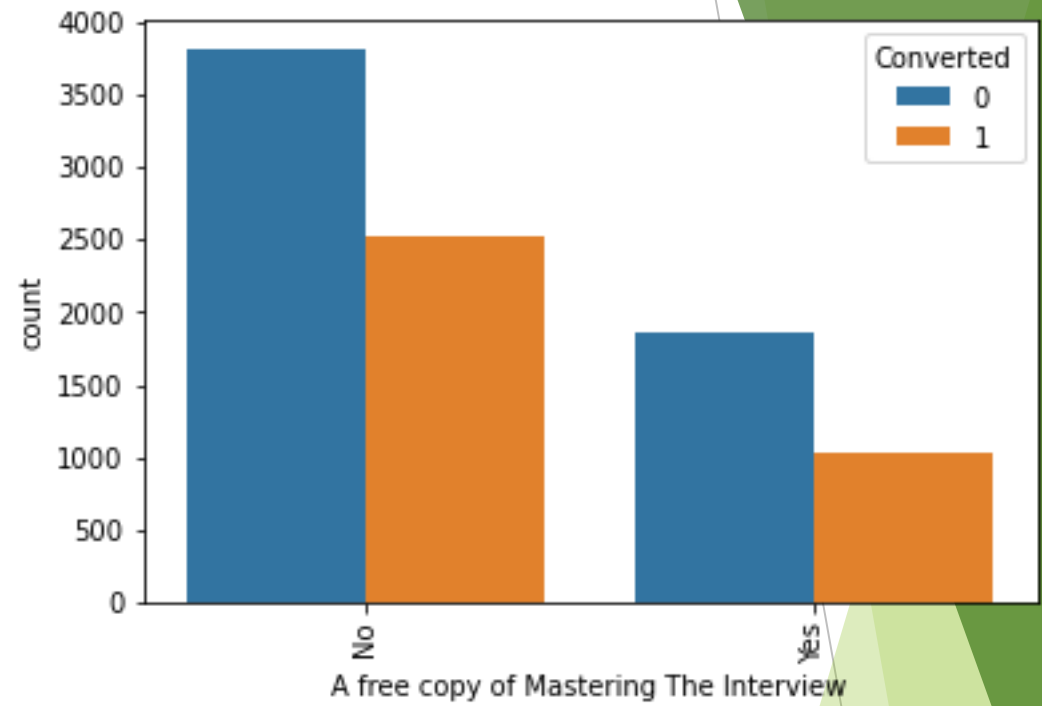
Most leads are converted through messages.

TAGS VS CONVERTED



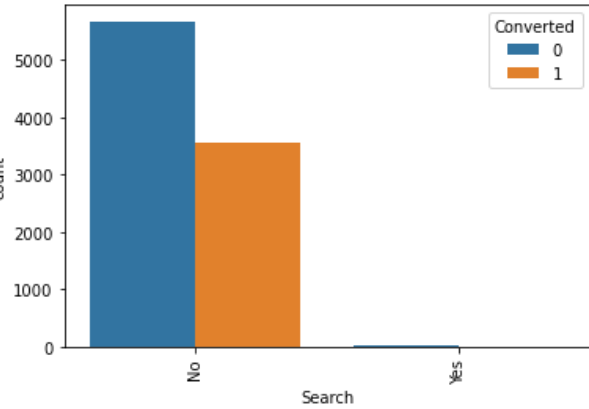
*"will revert after reading the email",
"closed by horizzon", Lost to ENS
have a very high conversion rate.*

A FREE COPY OF MASTERING THE INTERVIEW VS CONVERTED

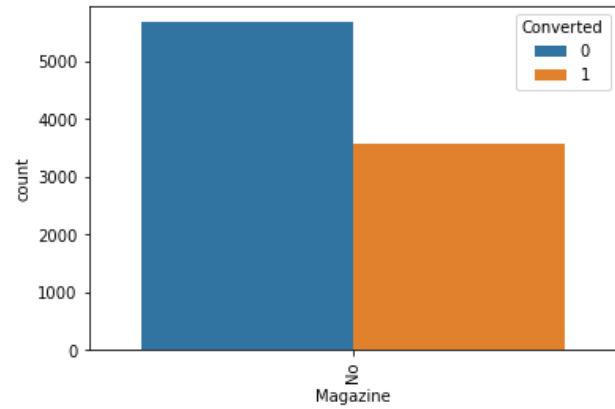


Leads prefer fewer copies of interview

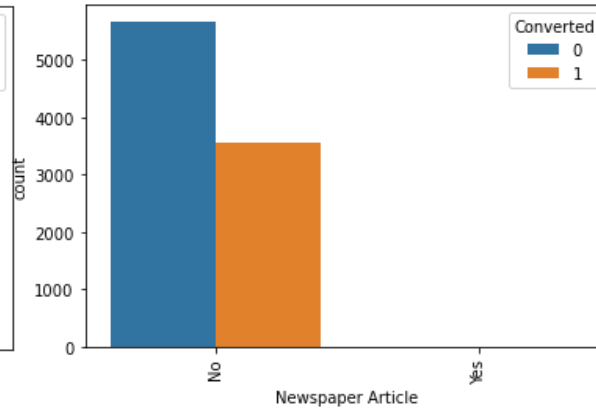
SEARCH VS CONVERTED



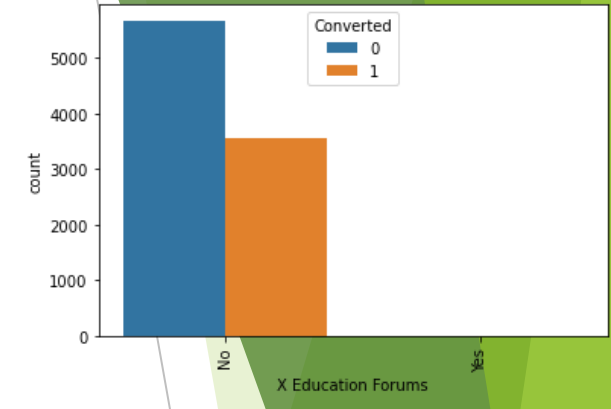
MAGAZINE VS CONVERTED



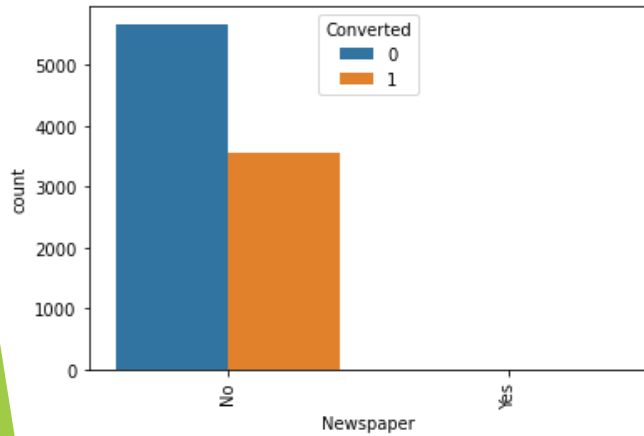
NEWSPAPER ARTICLE VS CONVERTED



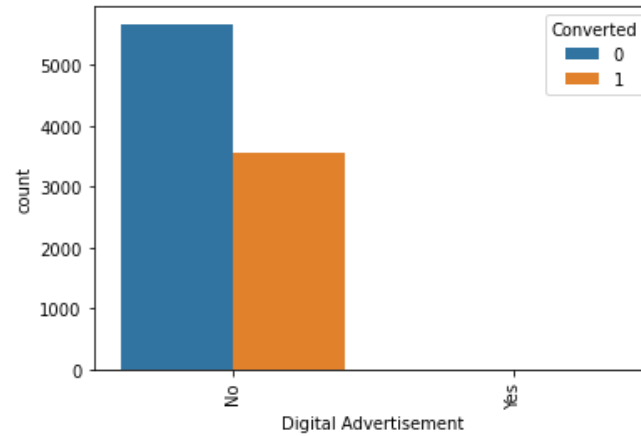
X EDUCATION FORUMS VS CONVERTED



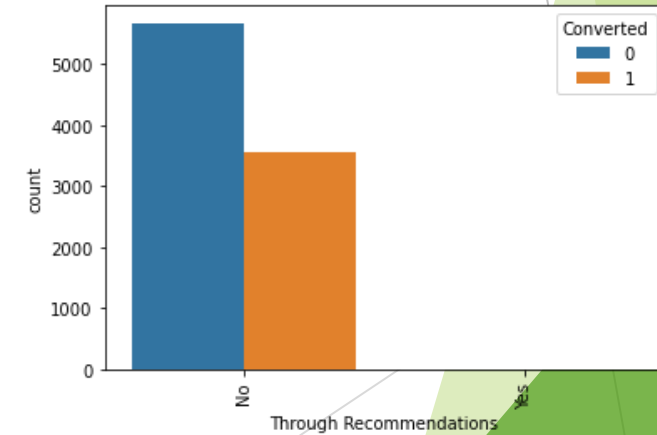
NEWSPAPER VS CONVERTED



DIGITAL ADVERTISEMENT VS CONVERTED

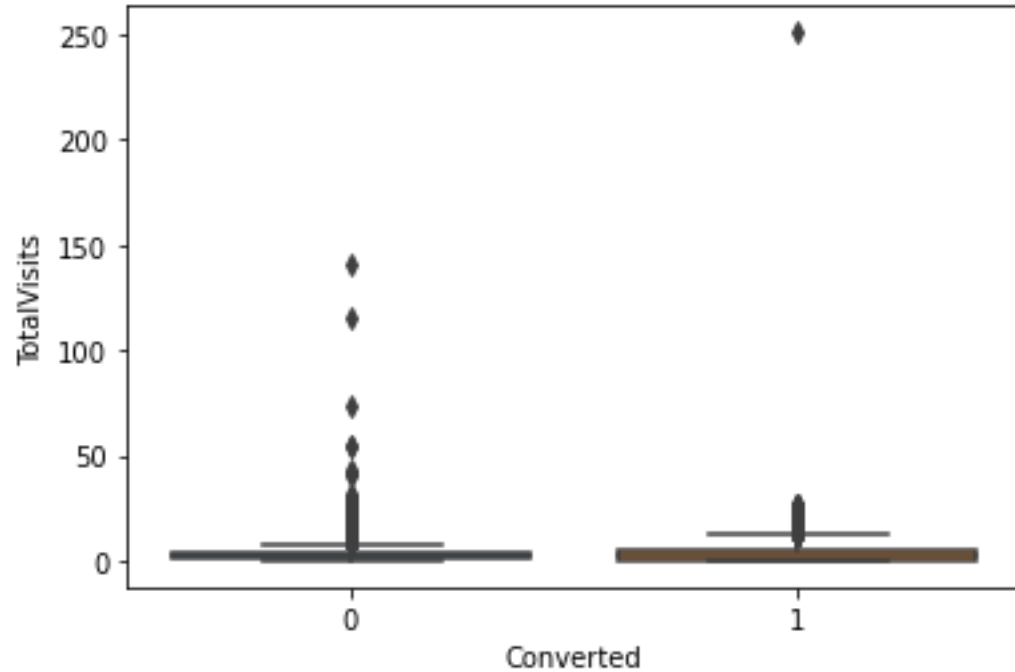


THROUGH RECOMMENDATIONS VS CONVERTED



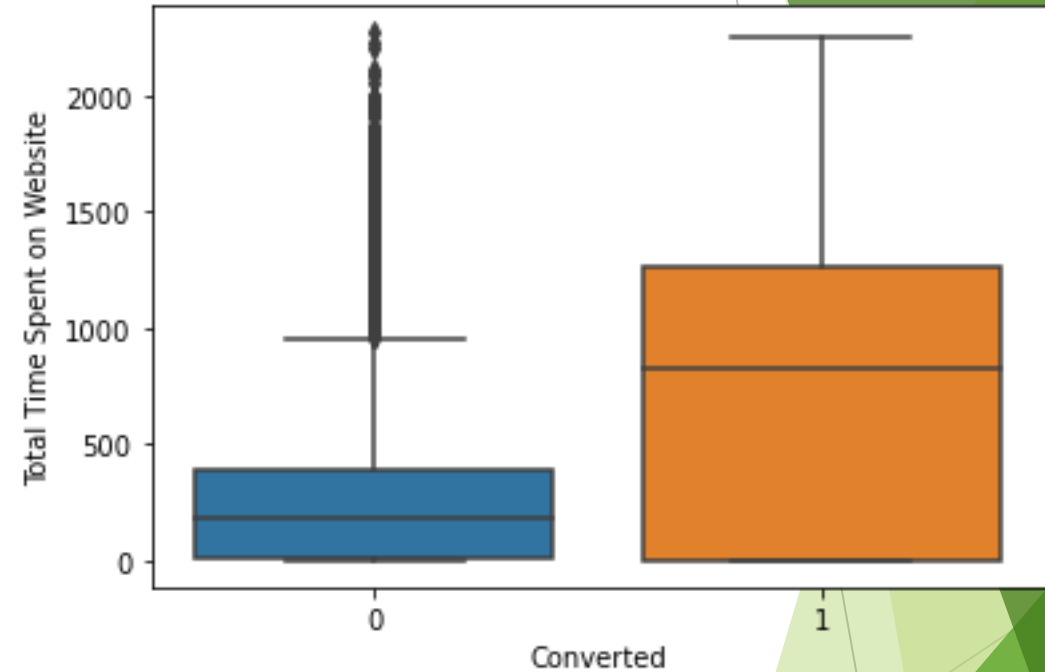
From the above graph, all of these are not good sources of promising leads because all of these don't have higher conversion rates.

TOTALVISITS VS CONVERTED



*People which are visiting more converted more.
Seems total visits has outliers*

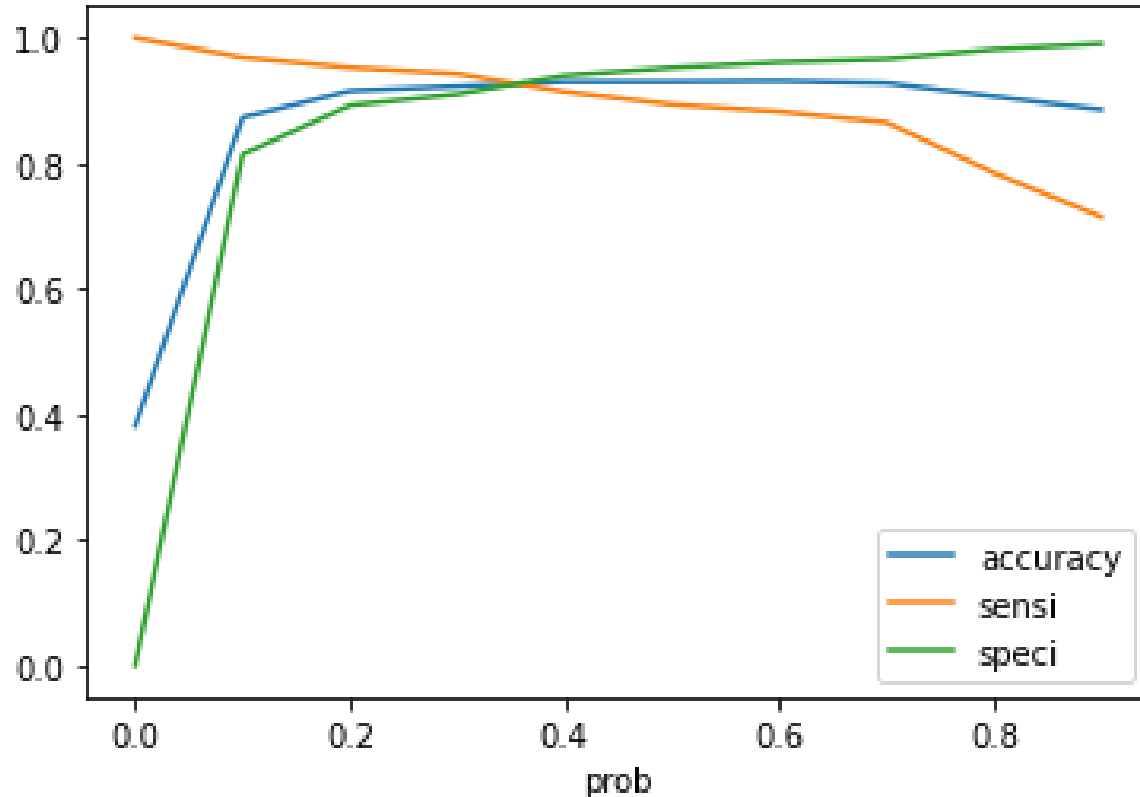
TOTAL TIME SPENT ON WEBSITE VS CONVERTED



People which are paying more time on the website chances are they converted easily and are promising leads.

MODEL EVALUATION FOR TRAIN AND TEST DATA

the optimal cut-off



threshold has been set as 0.4

ACCURACY SENSITIVITY AND SPECIFICITY FOR TRAIN DATA

- accuracy = 92.96 %
- sensitivity = 91.36 %
- specificity = 93.95 %

ACCURACY SENSITIVITY AND SPECIFICITY FOR TEST DATA

- Final predicted test model evaluation
- accuracy = 93.14 %
- sensitivity = 92.97 %
- specificity = 93.26 %
- Model predicted for test performed exceptional all the evaluation metrics are more than 90%*

CONCLUSION

EDA:

- SMS messages can have a high impact on lead conversion.
- Finance management, human resources management, and marketing management have high conversion rates. People from these specializations can be promising leads.
- People spending higher than average time are promising leads, so targeting them and approaching them can be helpful in conversion.
- Search, magazines, newspapers, digital advertisement, x education forums, recommendations, and newspaper articles are not helpful because all these are very low conversion rates. Do not focus on these.

LOGISTIC REGRESSION MODEL:

- The model shows high close to 93% accuracy.
- The threshold has been selected from Accuracy, Sensitivity, and Specificity is 0.4.
- The model shows 93% sensitivity and specificity.
- The model finds all the evaluation metrics are more than 90%.
- Overall this model proves to be accurate.