LEAD SCORING CASE STUDY

By:

Nishaanth M S

PROBLEM STATEMENT

- Industry professionals can purchase online courses from X Education, an education firm. Many experts who are interested in the courses visit their website and look over the course offerings on any given day. They offer a form-filling procedure on their website, following which the business takes the lead.
- Following the acquisition of these leads, sales team members begin contacting customers by phone, email, etc. While the majority of the leads do not convert during this procedure, some do.
- At X Education, the average lead conversion rate is about 30%. This implies that only roughly 30 of the 100 leads they generate in a day will actually be converted. The organization wants to find the most potential leads, or Hot Leads in order to streamline this procedure.
- Since the sales staff will now be concentrating more on interacting with the potential prospects rather than calling everyone, the lead conversion rate should increase if they are successful in identifying this group of leads.

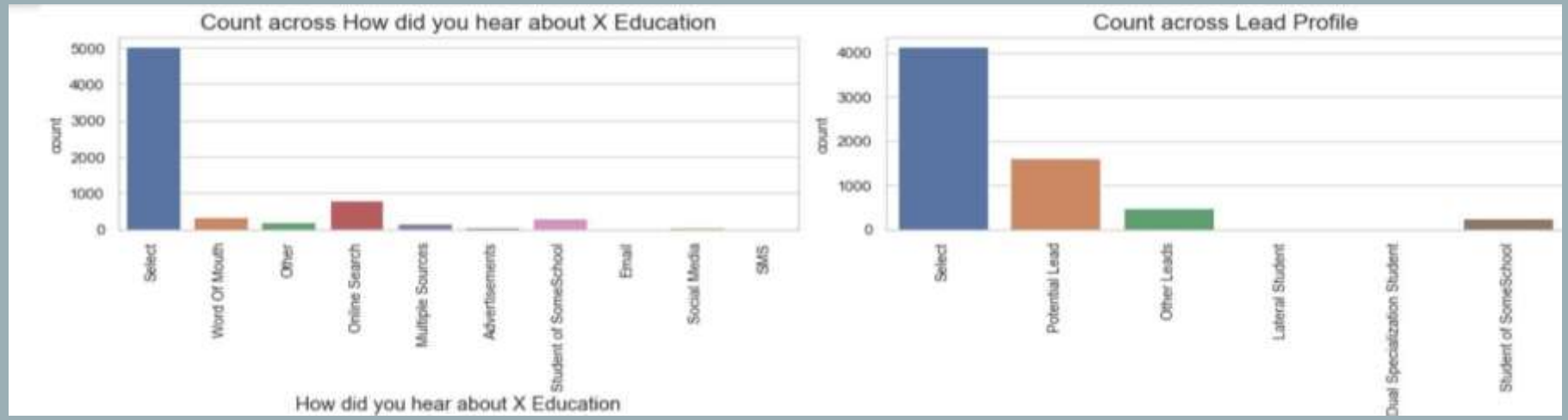
BUSINESS OBJECTIVES

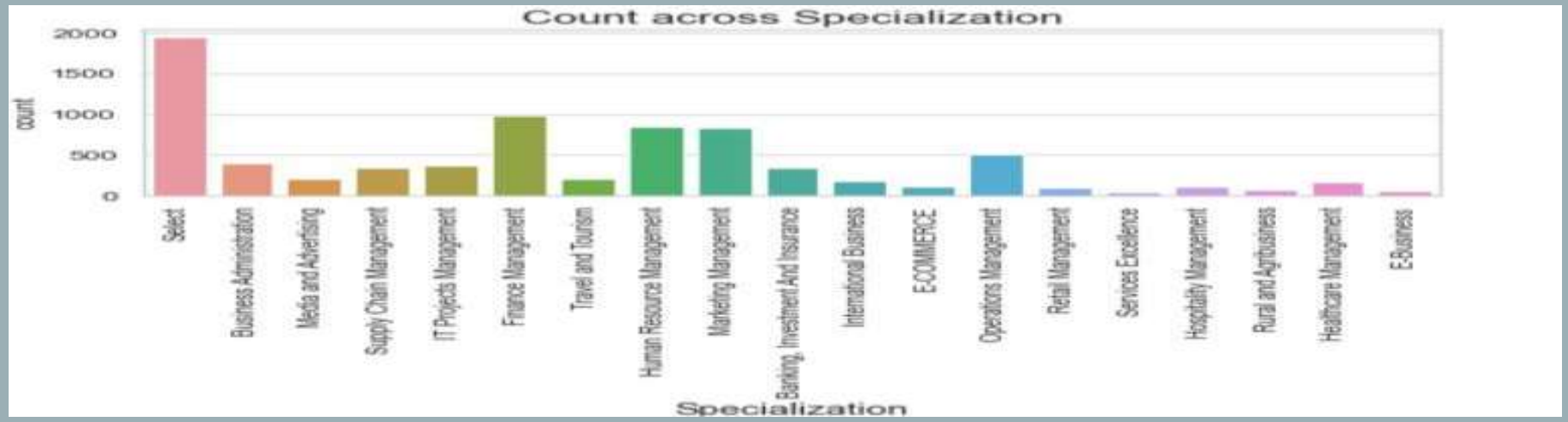
- Lead X requests that we develop a model that assigns a lead score ranging from 0 to 100 to each lead. In order for them to find the hot leads and boost their conversion rate.
- The CEO aims for an 80% lead conversion rate.
- They want the model to be able to manage future limitations as well, such as the activities that must be taken during peak times, how to use all available manpower, and what to do once the goal has been reached.

PROJECT APPROACH

- Importing the data and inspecting the data frame
- Data preparation
- EDA
- Dummy variable creation
- Test-Train split
- Feature scaling
- Correlations
- Model Building (RFE Rsquared VIF and p- values)
- Model Evaluation
- Making predictions on test set

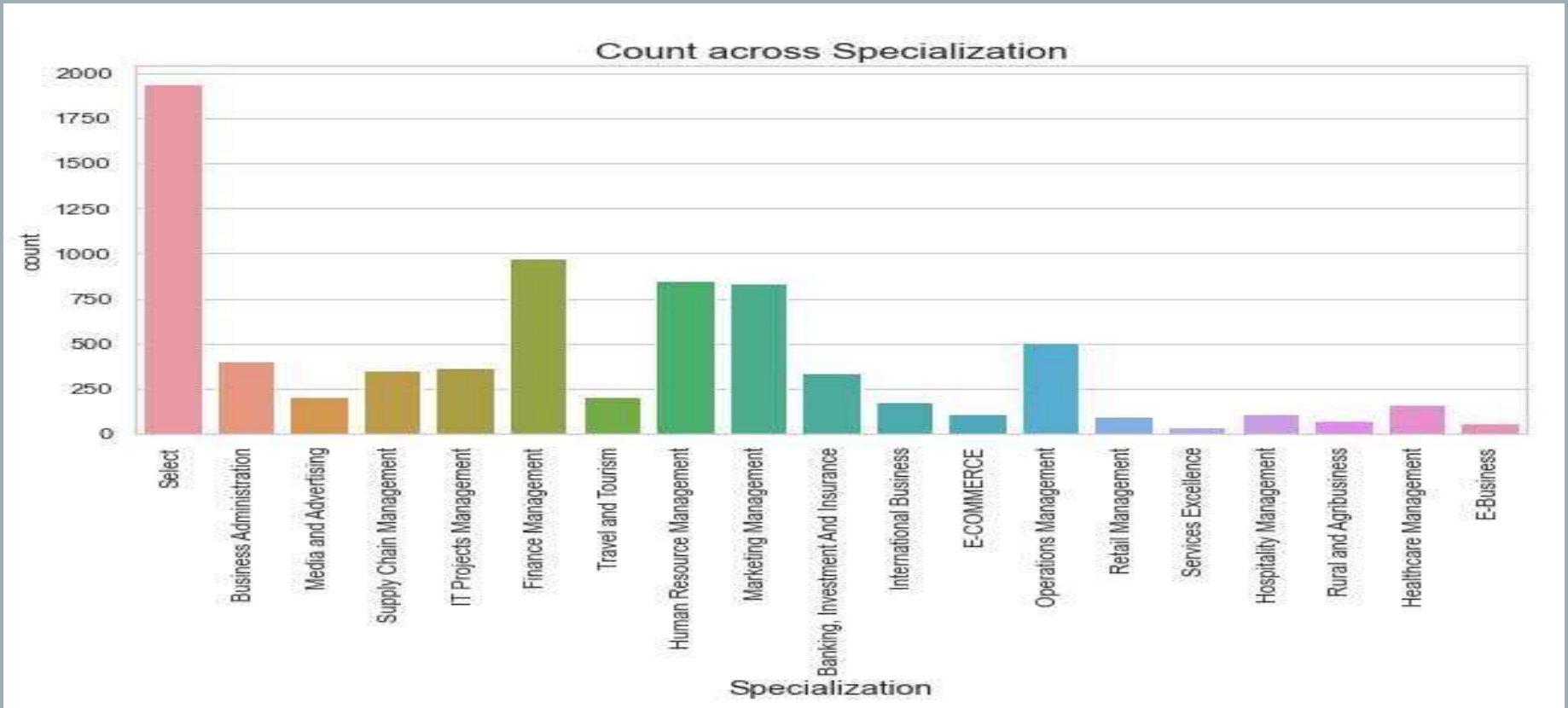
EDA


Count across How did you hear about X Education
count
5000
4000
3000
2000
1000
0
Select
Word Of Mouth
Other
Online Search
Multiple Sources
Advertisements
Student of SomeSchool
Email
Social Media
SMS
How did you hear about X Education
Count across Lead Profile
count
4000
3000
2000
1000
0
Select
Potential Lead
Other Leads
Lateral Student
Dual Specialization Student
Student of SomeSchool


Count across Specialization
count
2000
1500
1000
500
0
Select
Business Administration
Media and Advertising
Supply Chain Management
IT Projects Management
Finance Management
Travel and Tourism
Human Resource Management
Marketing Management
Banking, Investment And Insurance
International Business
E-COMMERCE
Operations Management
Retail Management
Services Excellence
Hospitality Management
Rural and Agribusiness
Healthcare Management
E-Business
Specialization

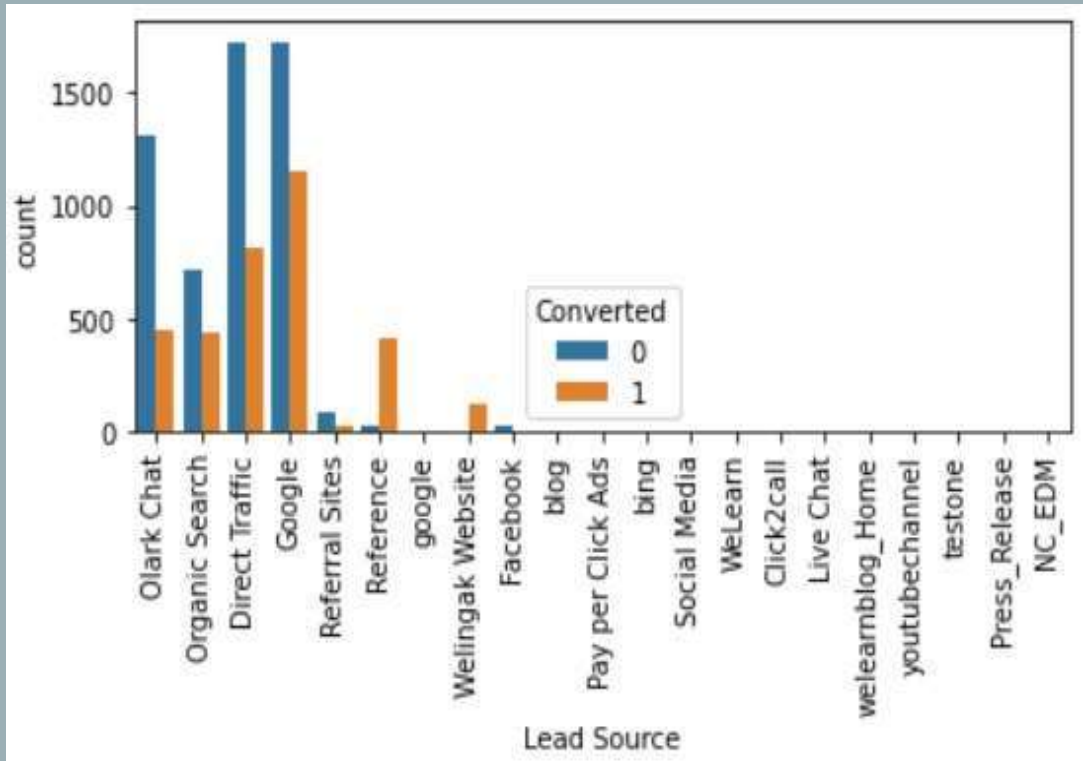
SPECIALIZATION

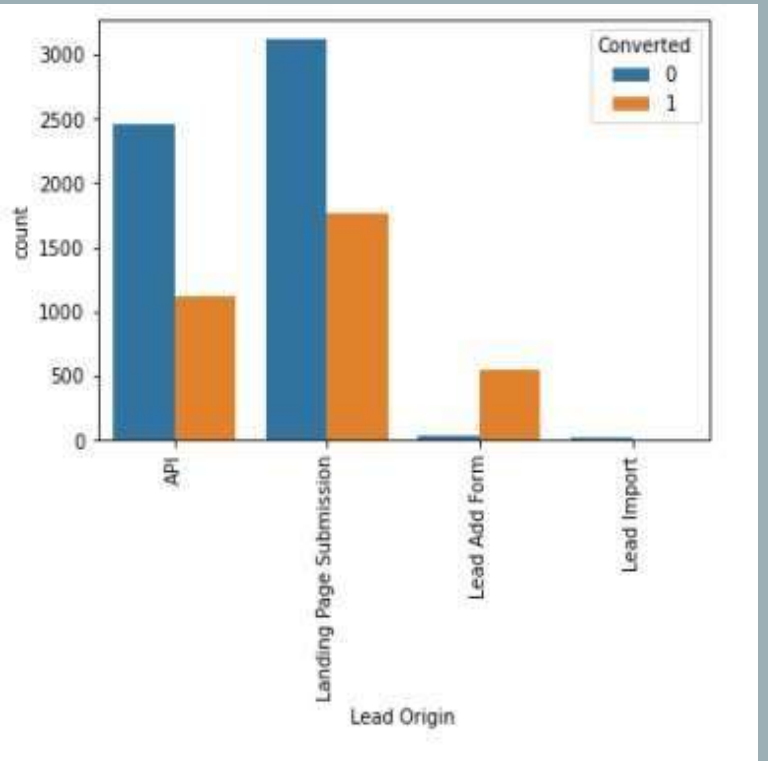
- There is a strong likelihood that leads from management specialties in marketing, finance, and human resources will convert.



LEAD SOURCE

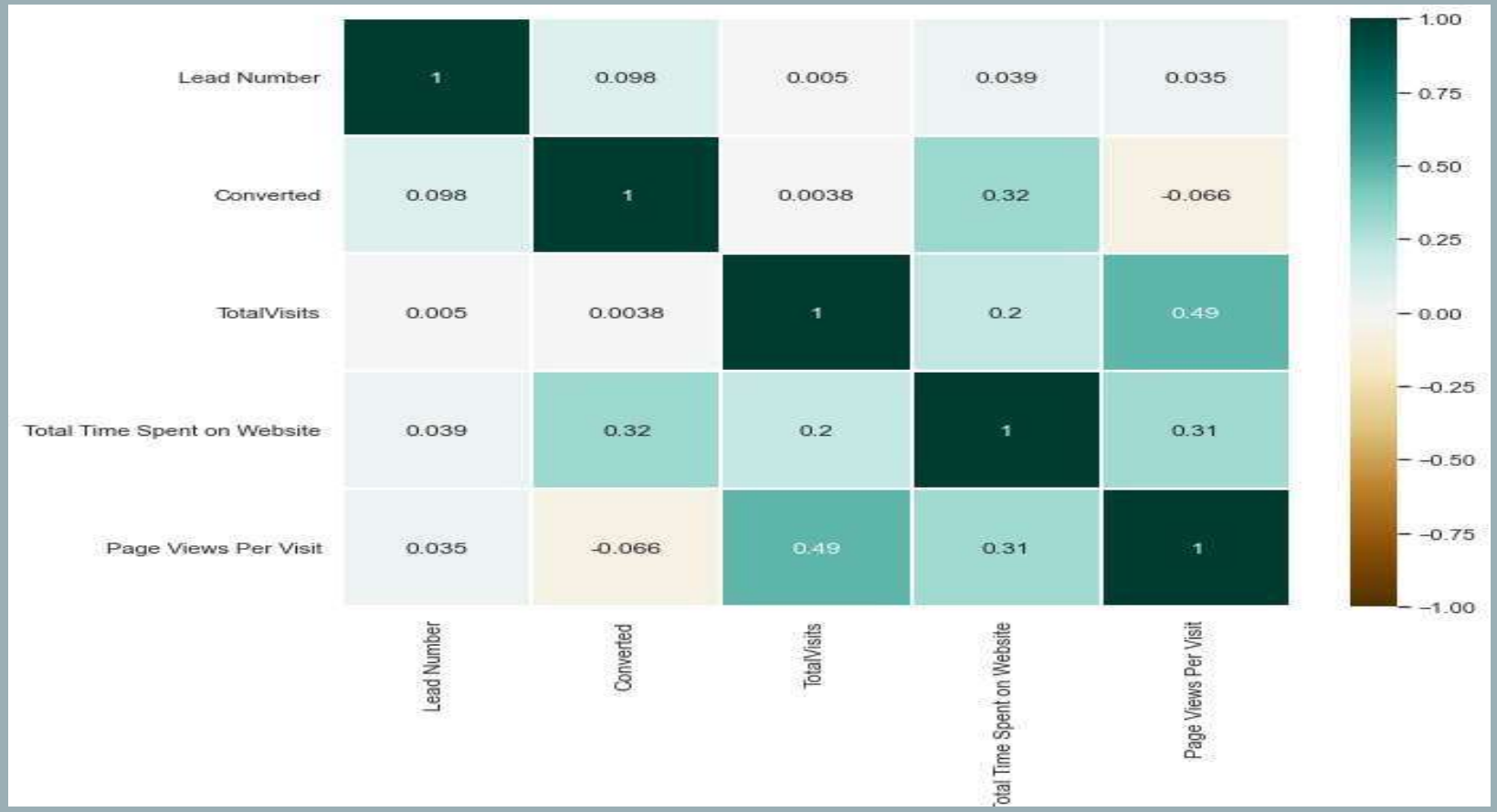
- Leads sourced from Google and direct traffic have a high conversion rate.
- In contrast, the majority of leads in Lead Origin arrive upon submission.





CORRELATION

- The variables do not correlate with one another.



OBSERVATION

- Train Data:

  Accuracy: 80%

  Sensitivity: 77%

  Specificity: 80%

- Test Data:

  Accuracy: 80%

  Sensitivity: 77%

  Specificity: 80%

Features:

- Lead Source_Olark Chat
- Specialization_Others
- Lead Origin_Lead Add Form
- Lead Source_Welingak Website
- Total Time Spent on Website
- Lead Origin_Landing Page Submission
- What is your current occupation_Working Professionals
- Do Not Email

CONCLUSION

- We observe that Google and direct traffic create the greatest number of leads. The maximum conversion rate is based on the Welingak website and reference.
- We observe that the conversion rate for submitting landing pages and APIs is between 30 and 35 percent, which is nearly average. However, quite low for Lead import and Lead Add form. As a result, we may step in and concentrate more on the leads that came from the submission of landing pages and APIs.
- Conversion rates are higher for leads who spend more time on the page.
- The most frequent last action is opening an email. SMS Sent has the highest rate. Max is not working. maximum conversion with a professional in the workforce.