



# LEAD SCORING CASE STUDY

**X Education**

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# Understanding Problem Statement

**1.) Low Lead Conversion Rate:** Despite acquiring a significant number of leads daily, X Education has a low conversion rate of around 30%, indicating inefficiency in converting leads into paying customers.

**2.) Identification of 'Hot Leads':** The company lacks an effective method to identify the most promising leads (hot leads), which could enhance the focus and efficiency of the sales team's efforts.

**3.) Need for Predictive Model:** X Education requires a predictive model to assign lead scores, helping to prioritize leads based on their likelihood of conversion, with an ambitious target conversion rate of around 80%.



# Analysis Approach

Importing important  
libraries and  
understanding  
dataset

Data Cleaning and  
Preparation

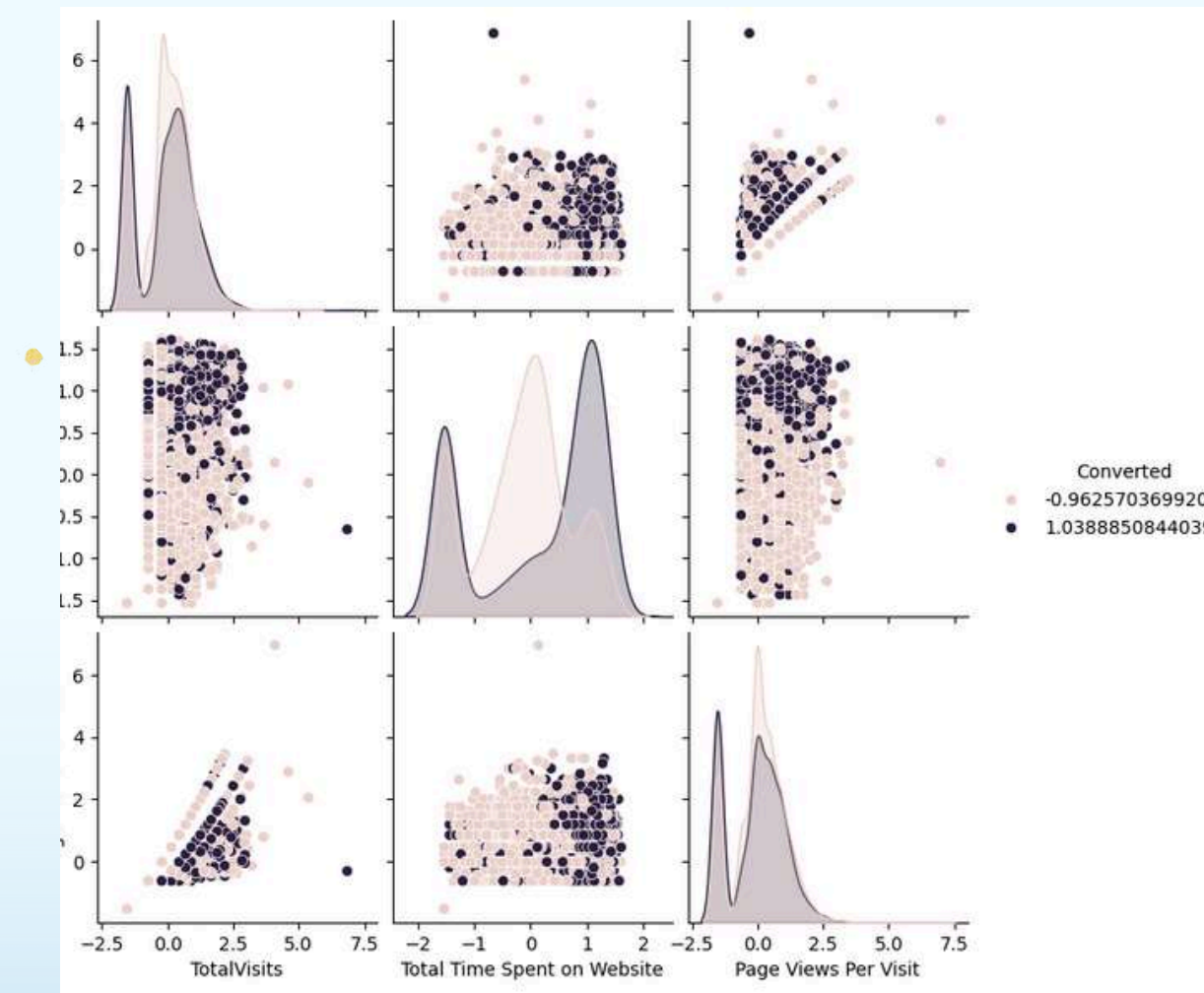
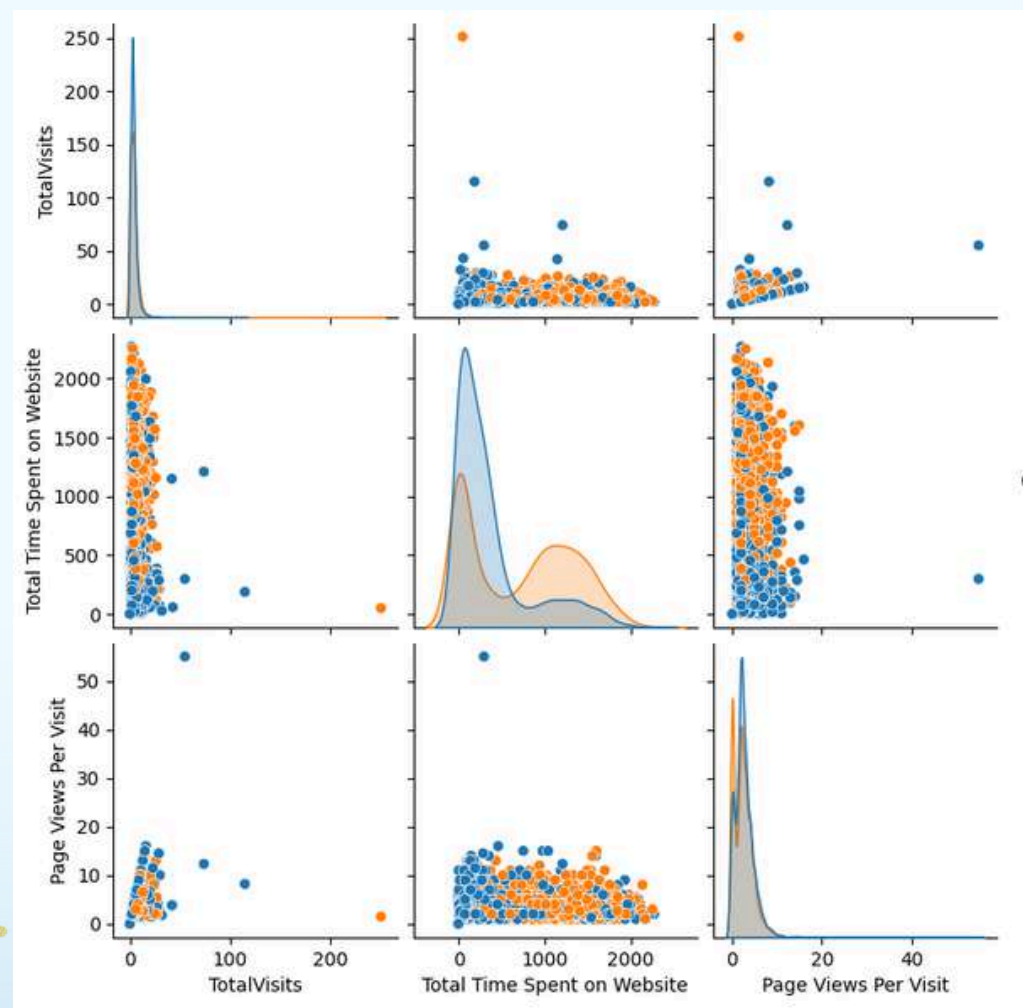
Model Building

Model Evaluation

Making predictions on  
the test set

Precision Recall View

Recommendations

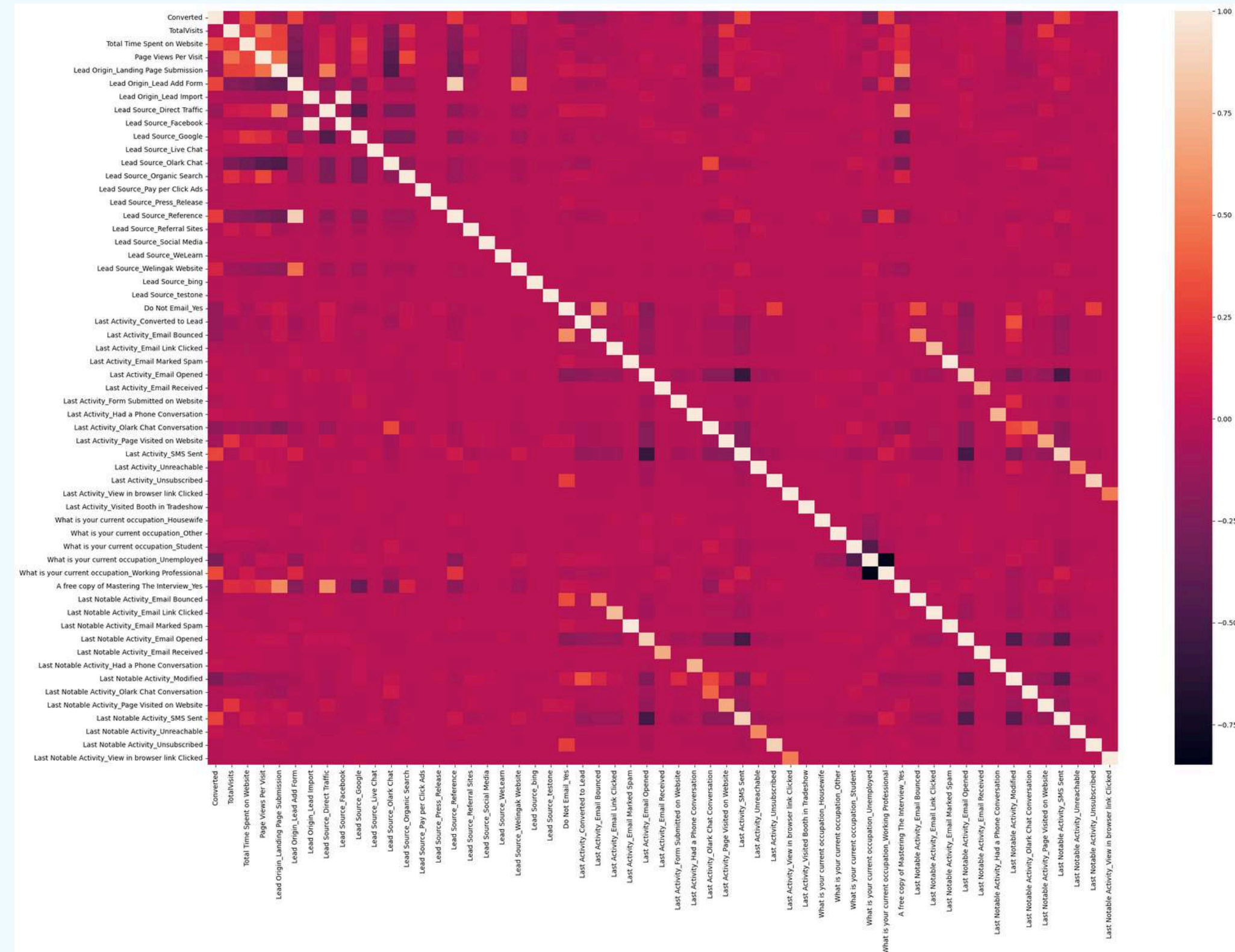




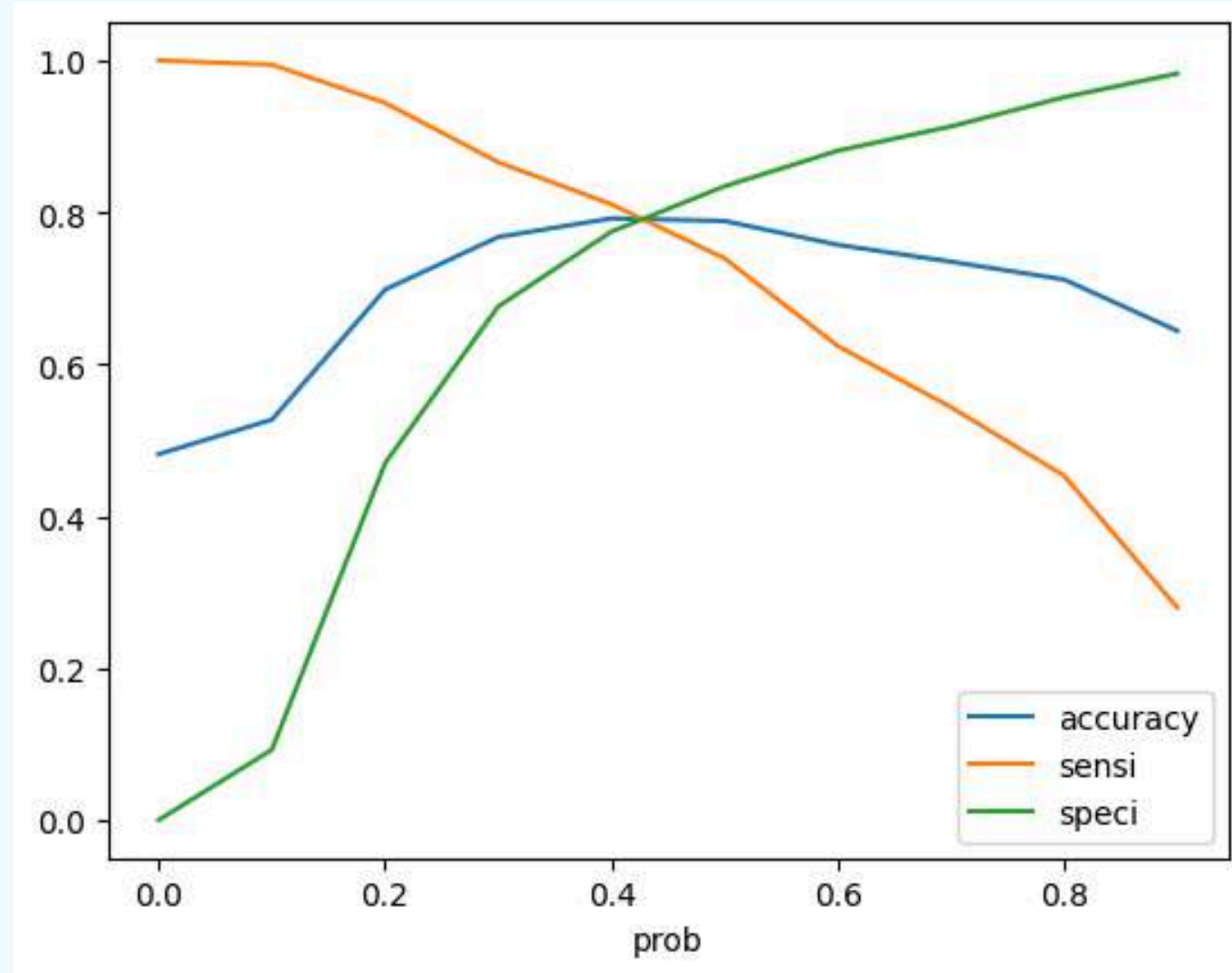
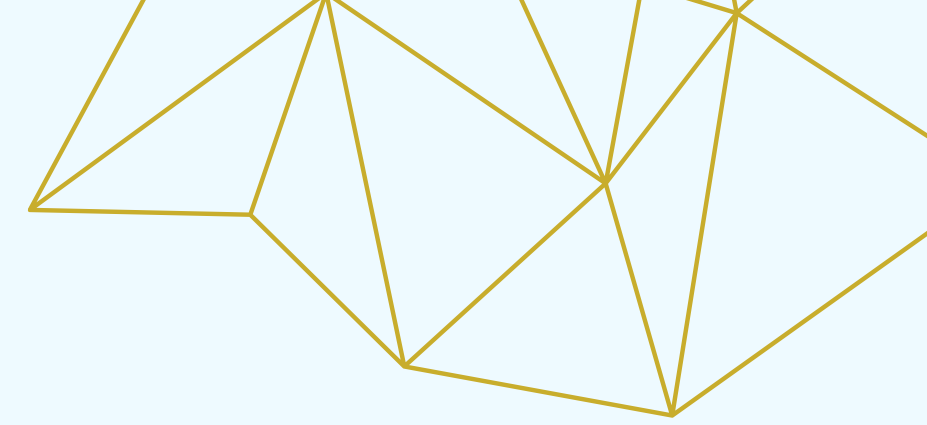
# Understanding key co-relations

## Observations

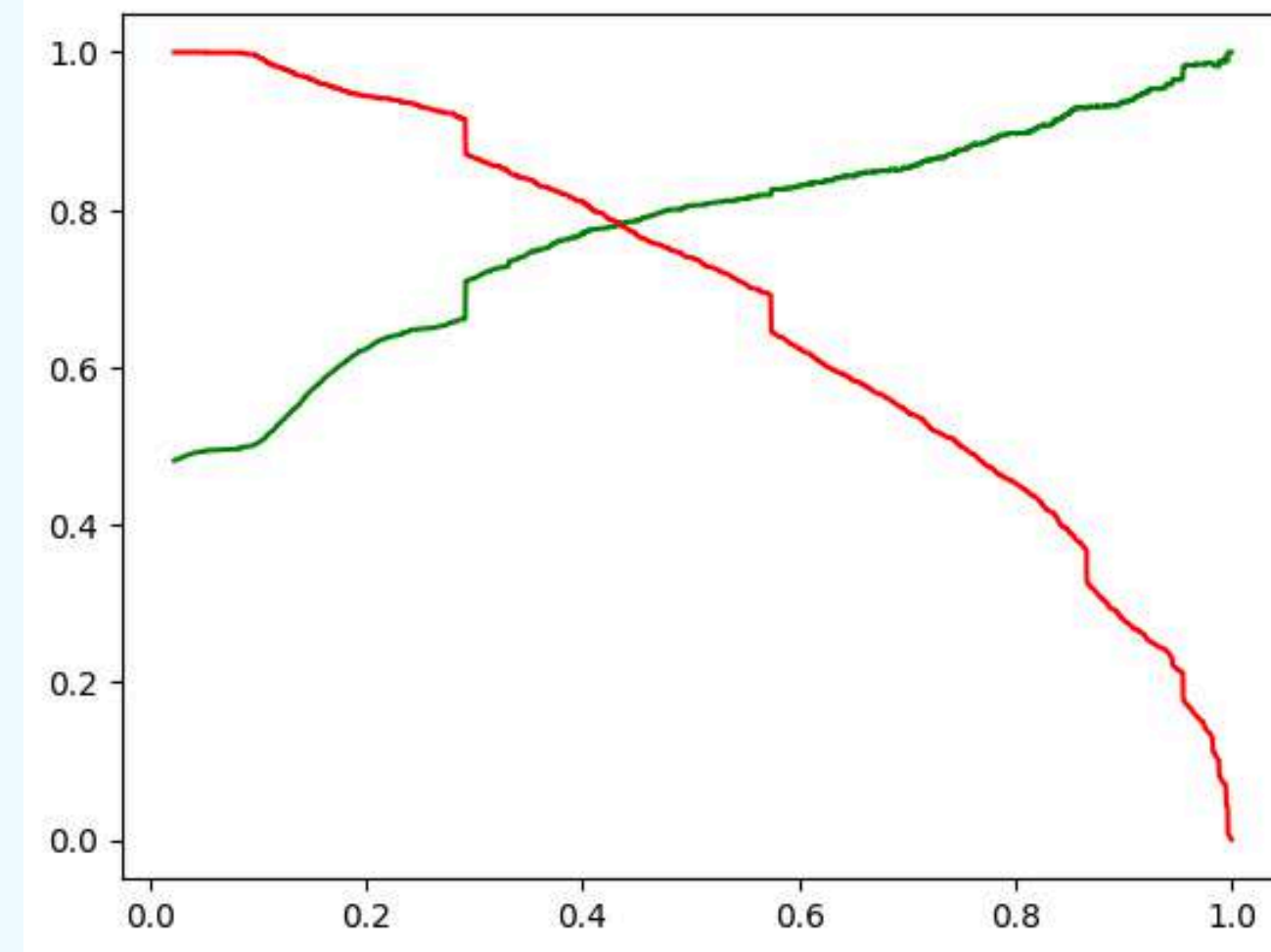
- There is a high correlation of 0.98 between 'Lead Source\_Facebook' and 'Lead Origin\_Lead Import'.
- 'Do Not Email' and 'Last Activity\_Email Bounced' also show a high correlation.
- 'Lead Origin\_Lead Add Form' and 'Lead Source\_Reference' have a correlation of 0.85.
- 'TotalVisits' and 'Page Views Per Visit' exhibit a correlation of 0.72..
- 'Lead Origin\_Lead Add Form', 'Lead Source\_Welingak Website', 'Last Activity\_SMS Sent', and 'What is your current Occupation\_Working Professionals' all have a positive correlation with the target variable 'Converted'.



# Solution Understanding (Technical aspects)

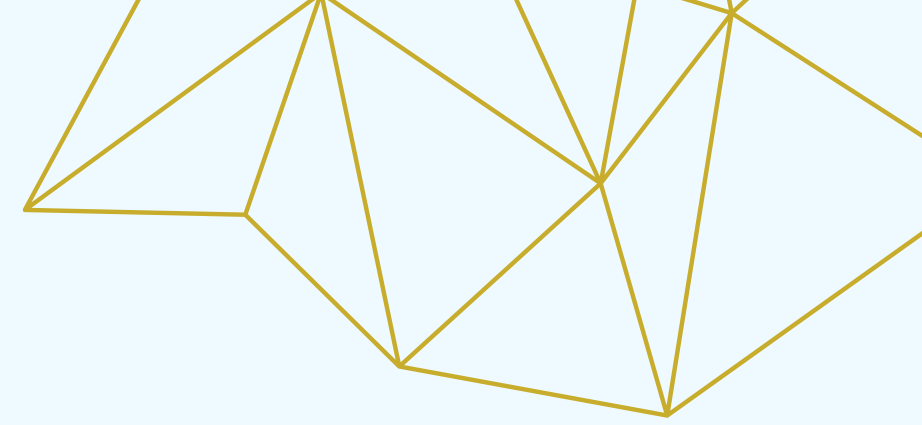


- **Optimum Cut-off** - 0.42
- **Sensitivity and Specificity** - App. 79% (Train Set)
- **Sensitivity and Specificity** - 77% and 79% respectively. (Test Set)



- **Threshold Cut-off** - 0.44
- **Final Precision and Recall** - App. 78% (Test Set)

# Solution Understanding (Business aspects)



**Important variables for getting potential buyers are (In descending order):**

1. The total time spends on the Website.
2. Total number of visits.
3. When the lead source was:
  - Google
  - Direct traffic
  - Organic search
  - Welingak website
4. When the last activity was:
  - SMS
  - Olark chat conversation
5. When the lead origin is Lead add format.
6. When their current occupation is as a working professional.





# Recommendation

- Many leads are generated initially, but only a few become paying customers.
- Nurture potential leads by educating them about the product and maintaining constant communication to increase conversion rates.
- First, identify the best prospects using 'Total Visits,' 'Total Time Spent on Website,' and 'Page Views Per Visit,' which are key indicators of lead conversion.
- Keep a list of leads ready to inform them about new courses, services, job offers, and future study opportunities.
- Monitor each lead closely to tailor the information you provide.
- Offer job opportunities, information, or courses that align with the lead's interests.
- Create a detailed plan to address the needs of each lead to convert them into prospects.
- Focus on converted leads.
- Conduct Q&A sessions with leads to gather necessary information, make further inquiries, and set appointments to assess their intention and willingness to join online courses.





**THANK YOU**