IE Recruitment process Improvement

IE University commercial process

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OUTLINE

The guide through our work

- The purpose of our project
- Hubspot score analysis
- Business Proposal

PURPOSE OF OUR PROJECT

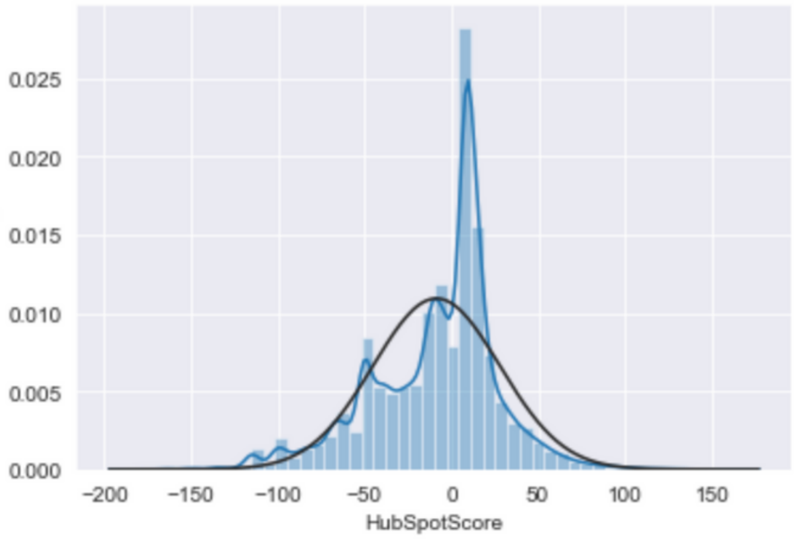
- Analyze the HubSpot Score to increase the potential pool of quality applicants of the university.

Introduction

Hubspot Score

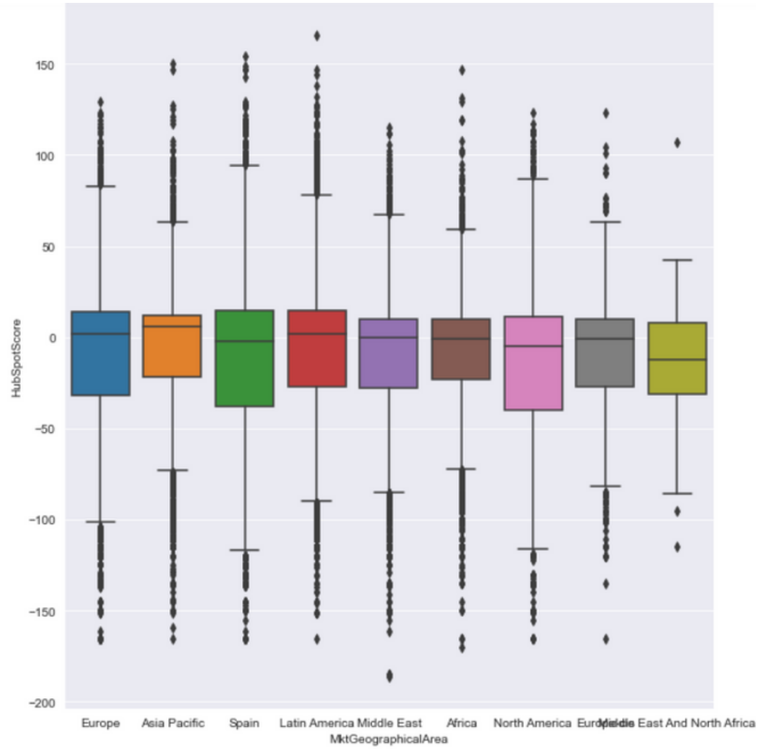
This variable determines the quality of the potential candidates (leads) to assess the probabilities that they might end up enrolling. Compute Hp score and perform reverse feature engineering to analyze which variables account for higher importance.

EDA Findings

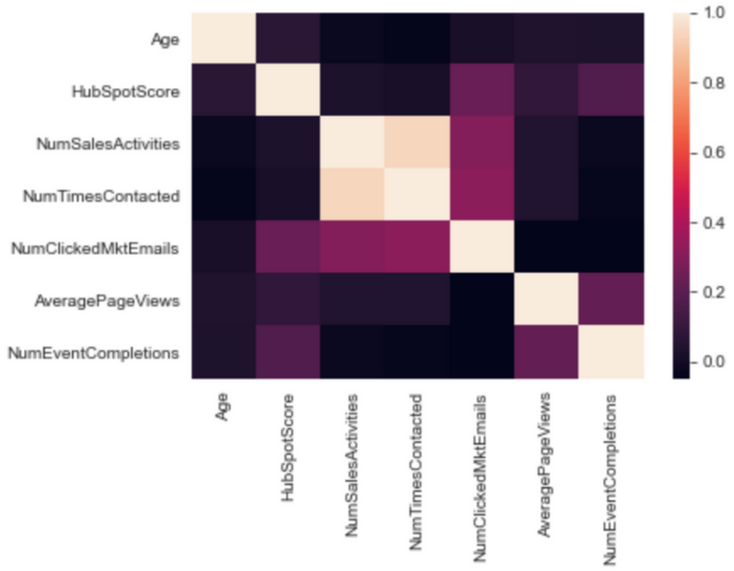


- **HubSpot Score Range**

Ranges from -165 to 166



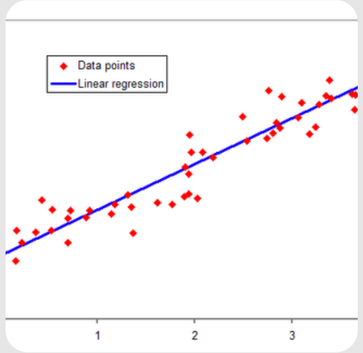
- **Geographical Area**



- **Num. Clicked emails**
- **Num. event completion**
- **Average page view**

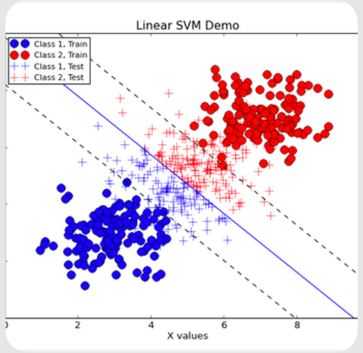
Regression models

Applying our findings of the EDA and after performing some feature engineering we built 3 different models.



Linear Regression

MSE: 577.566
MAE: 18.062
R^2 score: 0.667



Support Vector Regression

MSE: 577.566
MAE 17.397
R^2 score: 0.622

XG Boost

MSE: 560.518
MAE: 16.843
R^2 score: 0.69

Hubspot score

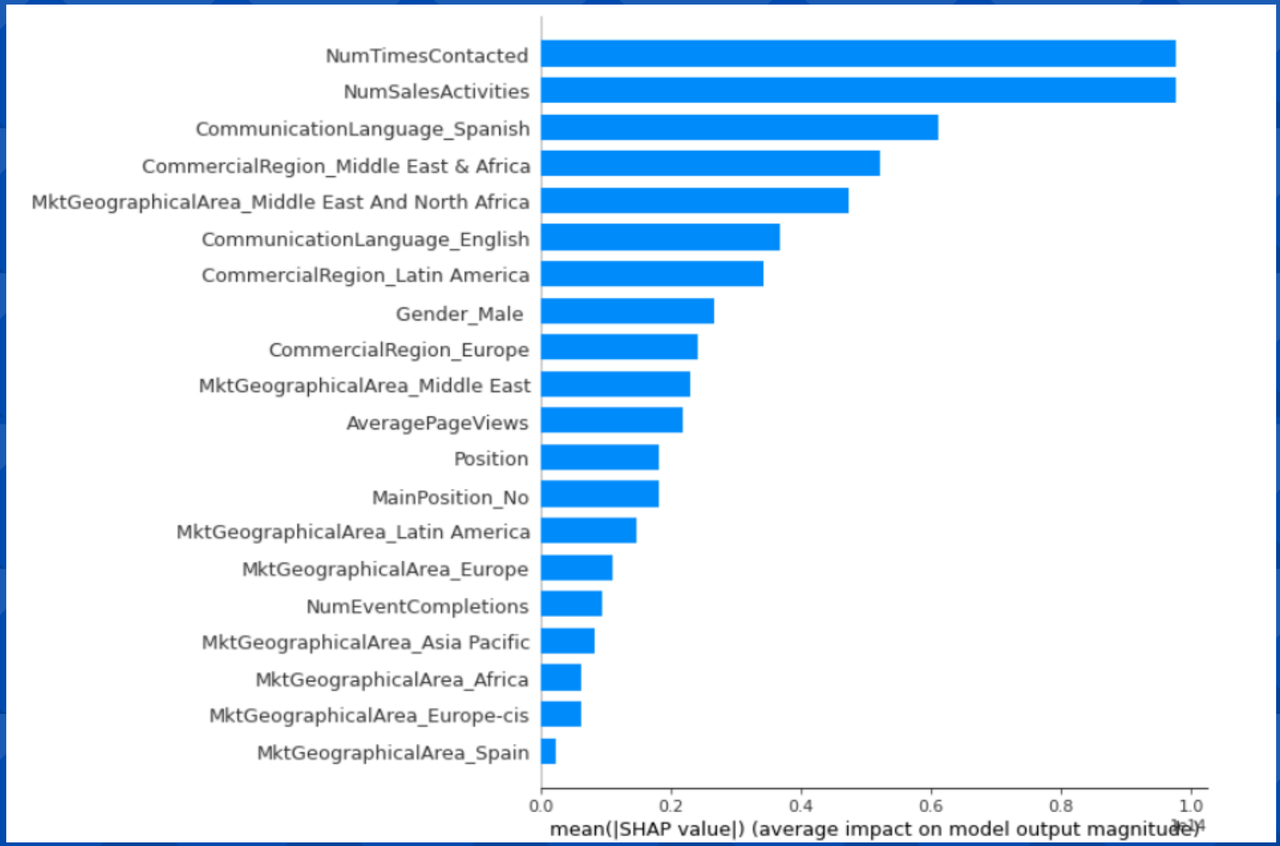
Reverse Engineering

We will now summarize the findings we obtained from preforming reverse engineering on our model

FEATURE IMPORTANCE

The features Number of Times Contacted and number of sales activities are one of the most important features when predicting the hub spot score.

The analysis was done with the shap library



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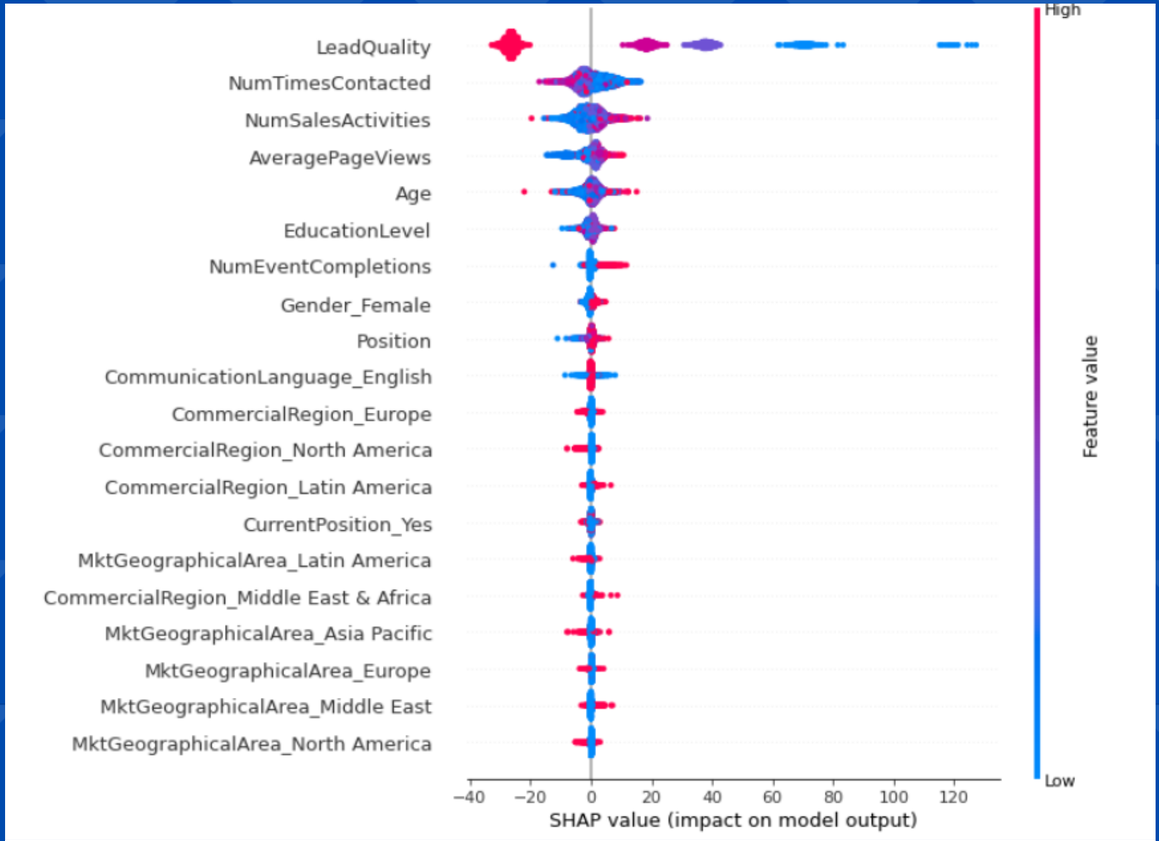
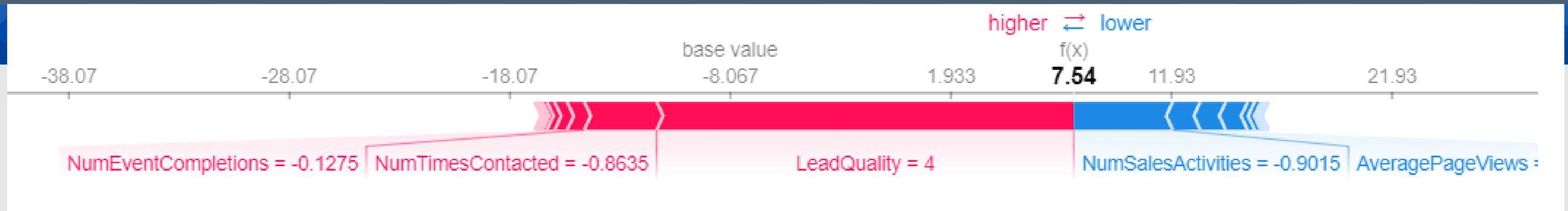
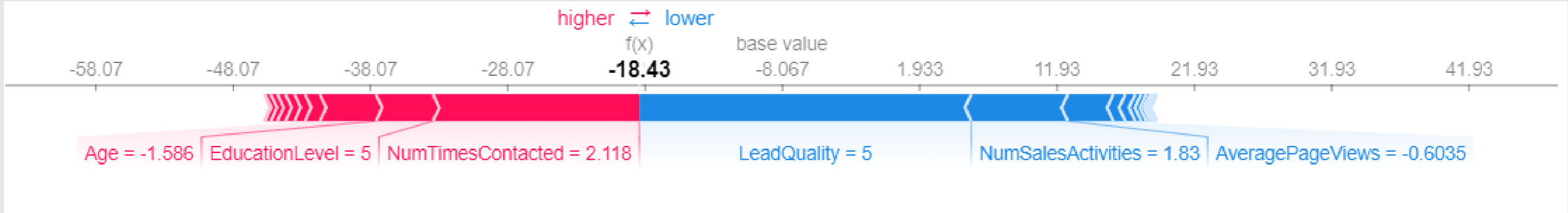


Closer look into the predictions

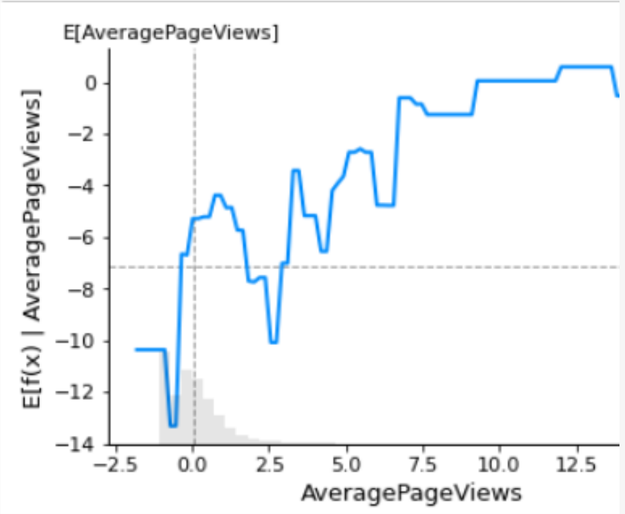
The variables that afect most the prediction based on our shap analysis are number of sales activities, number times contacted.



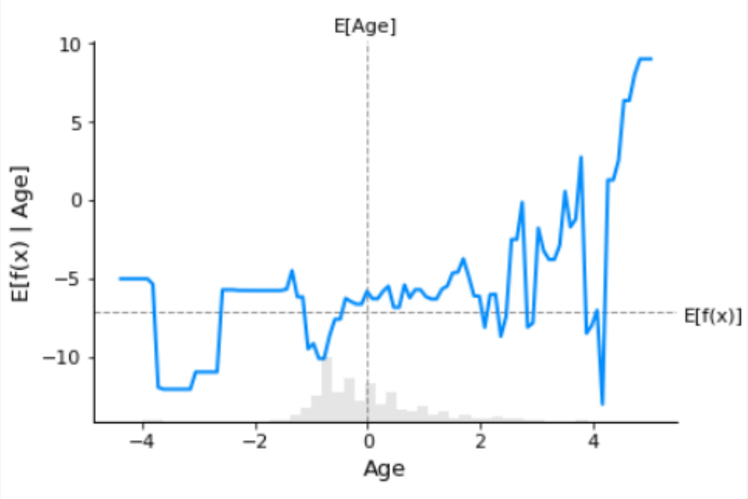


Closer look into the predictions (II)

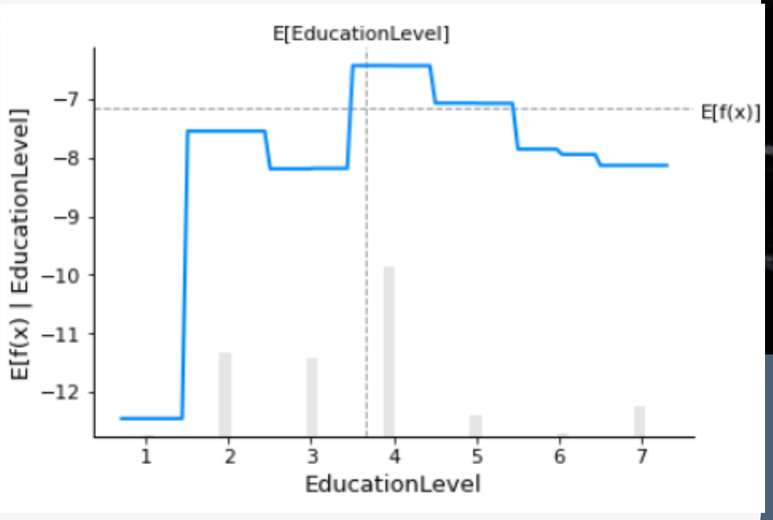
Average Page Views



Age

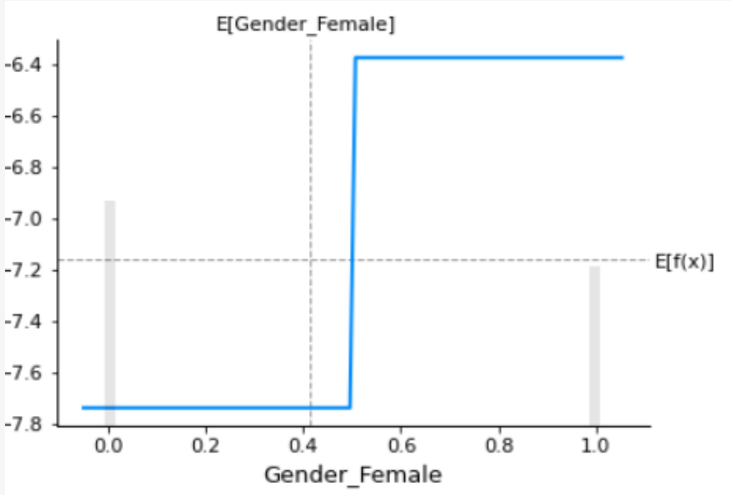


Education Level



Closer look into the predictions (III)

Gender



Main Findings of our Hubspot score analysis

Education

The candidate is considered more likely to show interest in the university if he or she does not have a PHD

Keep In touch

A fluid contact stream with the candidates is one of the main predictors of high hubspot score.

Demographic profile

Older potential applicants are more interested in IE. Females is also a characteristics sought by the university

BUSINESS PROPOSAL

- Put the model into production
- Marketing proposal based on our main findings

Marketing proposals based on our EDA and model findings

Social Media & schools

- Establish connections between IE University and prestigious worldwide schools
- Advertise on schools' social media platforms in order to promote school fairs.
- People that are older have more interest (Master degree = Higher hotspot score)
- Boost the undergraduate programs = equal interest

School fairs

- Offer virtual schools fairs
- Provide virtual reality experience in order for students to see IE campus and get to know the ie experience

Financial aid pomotion

- We have observed in our EDA analysis that 2020 was the year with a higher churn rate.
- We propose to keep promoting financial help and scholarships in order to not lose potential students .

Marketing proposals based on our EDA and model findings

Networking Events

- Event involvement has a postitive correlation with the HubSpotScote.
- "Congratulations for admission" email will contain an invitation to register for a networking event.
- Each department hosts an event with the possible future students
- Speech: teacher from the department and past student of the department .
- Food and drinks after the conference

Woman in business

- EDA analysis: Higher percentage of male (56.5%) than women (43.5%)
- Let´s attract more women
- Goal: Decrease the percentage of woman that churn by promoting the great impact of woman in business club events.

THANK YOU!