

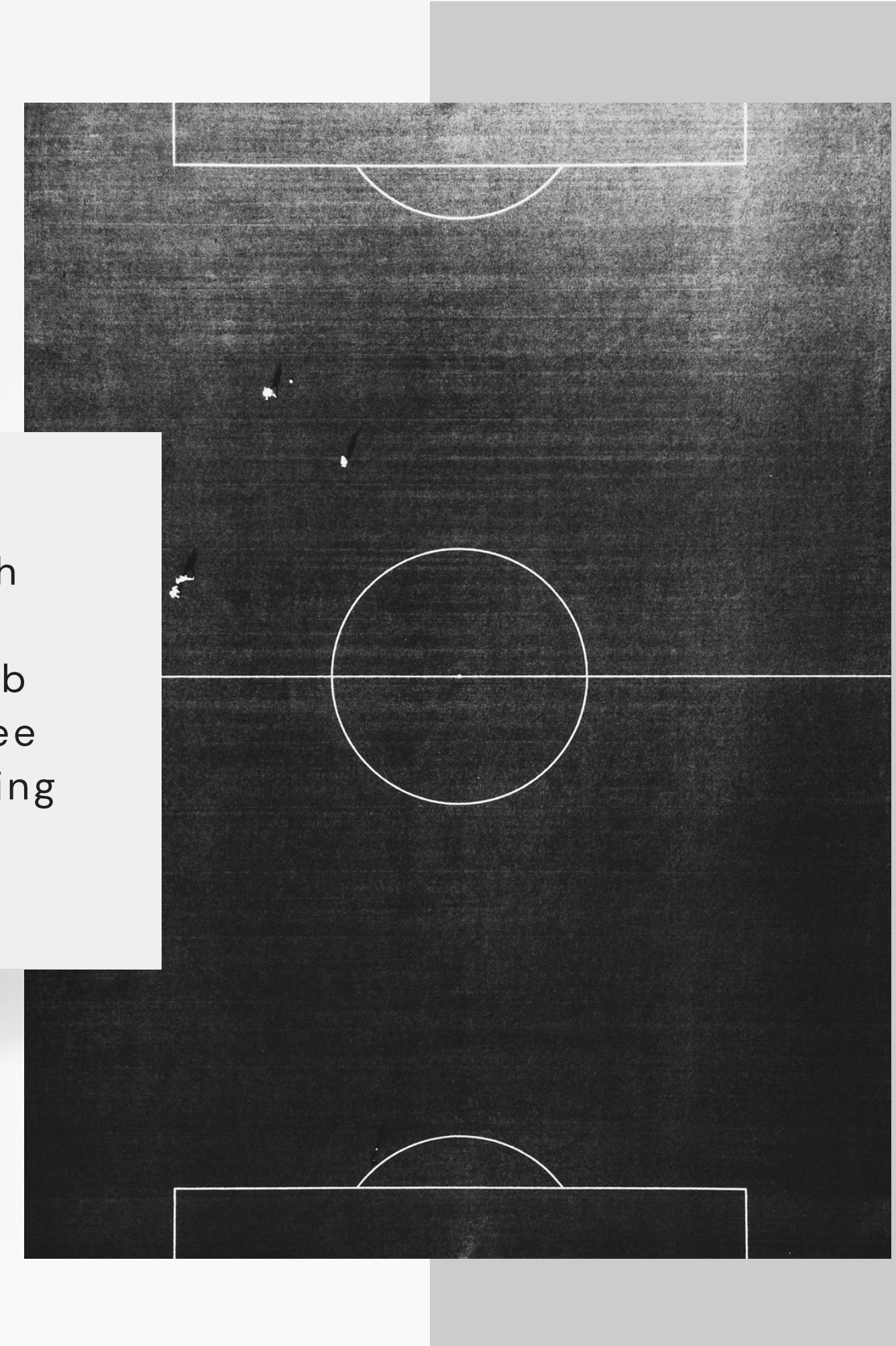


FIFA MONEYBALL PROJECT

THE PROJECT



Examine the dataset to understand which attributes are the best predictors of a football player's potential so that the club can sign future stars. Provide the top three players that your model recommends signing under a budget of \$100M.



GOALS AND OBJECTIVES

Objective n° 1

Ask interesting and thoughtful questions and find the data to answer them.

Objective n° 2

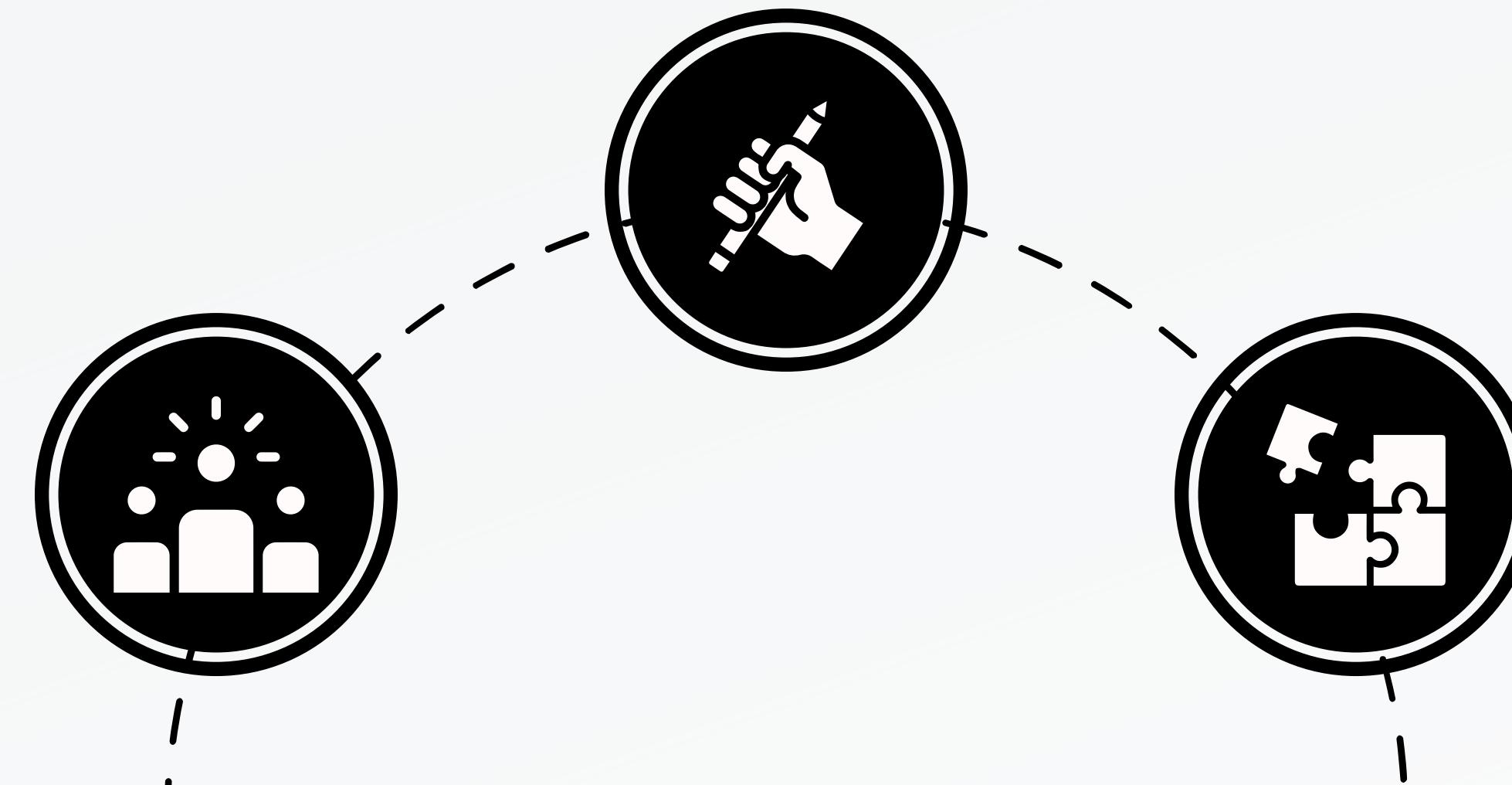
Apply the statistical techniques we have learned.

Objective n° 3

Create useful and clear graphs.

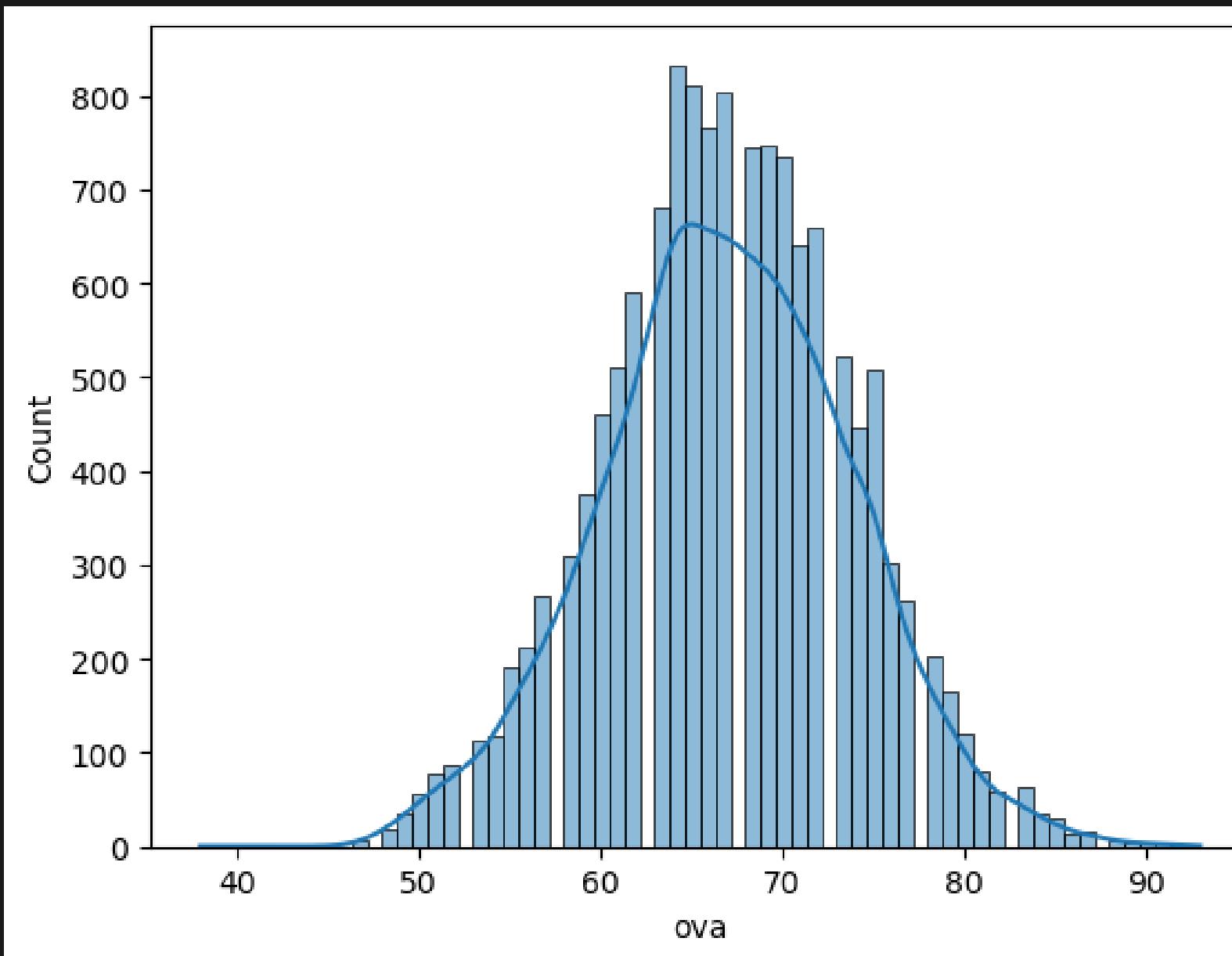
Objective n° 4

Create multiple models and compare them, so that you can convince the Chairman that your final model is the best.



OVA

Why is ova so important in this analysis?

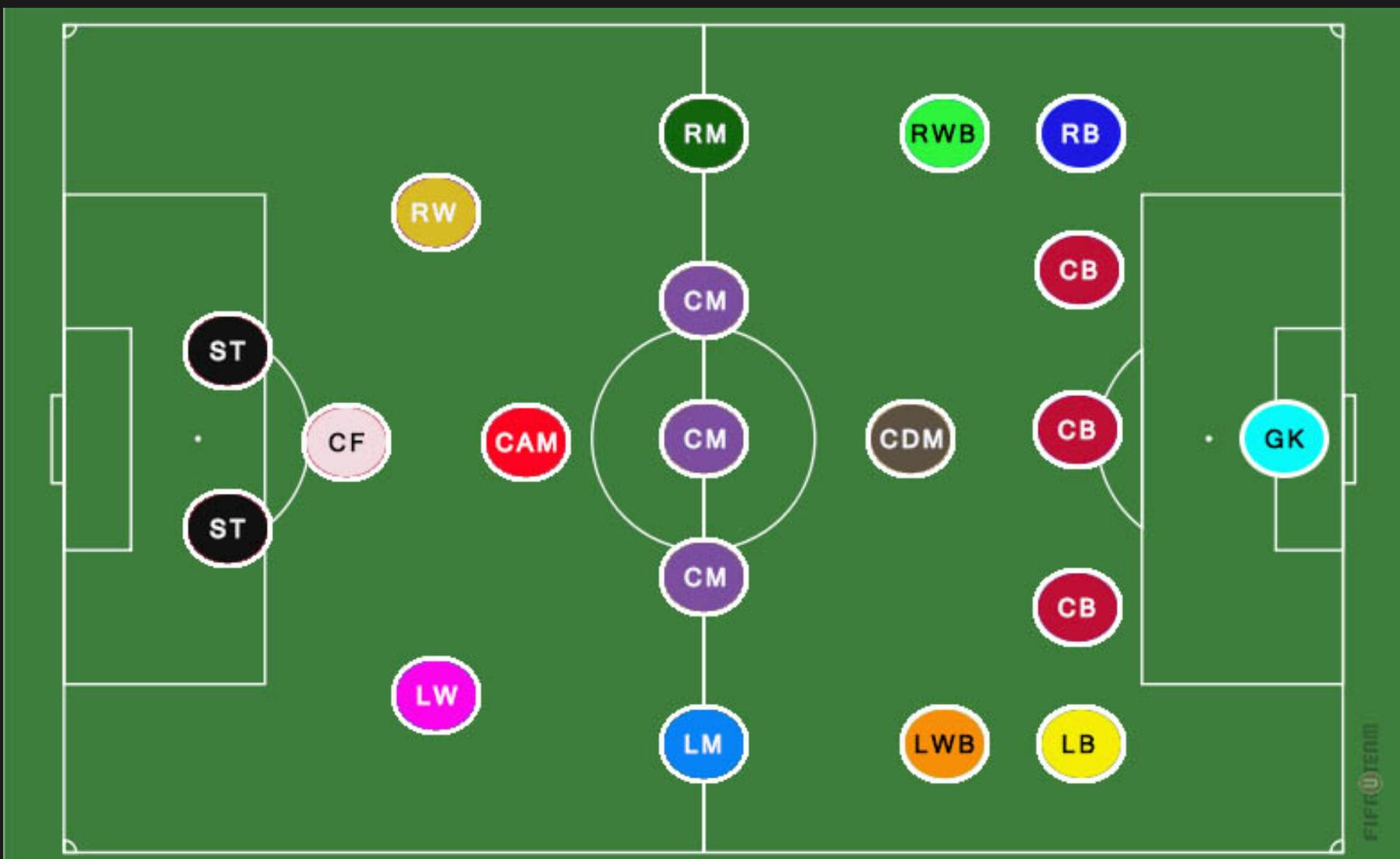


OVA represents how good a player is overall, considering all their attributes and abilities.

Using OVA, we can know who the best players are.

POSITIONS

We developed a script to train a model for predicting players' OVA. The players were separated and grouped by their positions, and INDIVIDUAL POSITION MODELS were created to analyze averages and assess correlations.



DEVELOPMENT

We analyzed the columns that had the highest correlation



Applied the linear regression model



Concat all results from all positions



We made a prediction filtering buy_data by position

- Within each position, we examined columns yielding the best results and applied the linear regression model. Subsequently, we made predictions by filtering within the 'buy_data' by position.
- We aggregated the results from all positions to consolidate our findings.

- We have developed a function to sort players in descending order based on their OVA predictions. This function initializes variables to track selected players and total cost. It iterates through the sorted DataFrame, checks if adding the player exceeds the budget, adds them to the list of selected players, updates the total cost, checks if we've selected three players, and finally converts the list of selected players into a DataFrame.

LAST FUNCTION



- Organized the players in decreasing order with the OVA prediction
- Started the variables to keep track of selected players and total cost
- Iterated through the sorted `data_frame`
- Checked if the player addition exceeded the budget
- Added the player to the list of selected players
- Updated the total cost
- Checked if we had already selected the three players
- Converts the list of selected players into a `DataFrame`

OUR 3 PLAYERS

Based on our analysis, our choice is:

M. Politano 19M€

V. Lazaro 16,5M€

M. Caldara 12M€

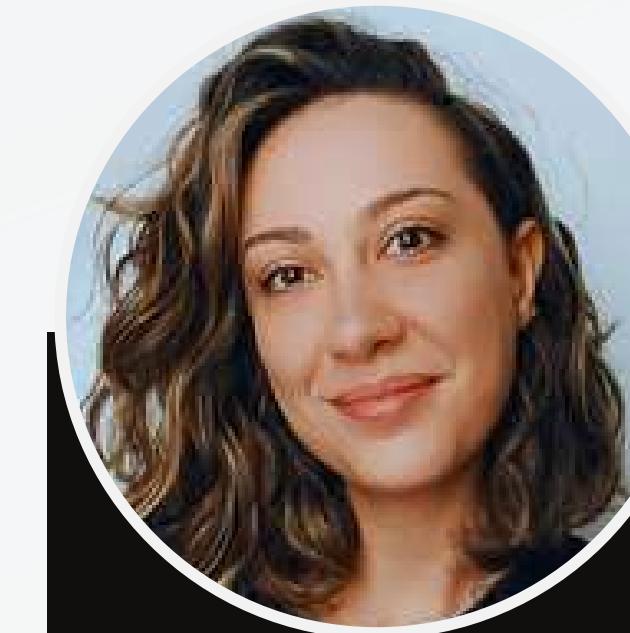
TOTAL 47M



OUR TEAM



Pedro
Barros
Ironhack Student



Fabiana
Ferraz
Ironhack Student



Davi
Santos
Ironhack Student

THANK'S FOR WATCHING

