

# **EVALUATING THE MARKET VALUE OF ENGLISH PREMIER LEAGUE PLAYERS FOR SUMMER INVESTMENTS BY ARSENAL F.C.**

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# INTRODUCTION

## ARSENAL PAST RESULTS

- Arsenal squad has been performing poorly in the past 2 seasons
  - Not scoring enough goals
  - Injuries and lack of squad depth





**EVEN  
GUNNERSAURUS  
IS UPSET  
WITH THE  
SITUATION....!**





# INTRODUCTION

## JANUARY TRANSFER MARKET PLANS

- Arsenal FC board and management had to react before things got too late
- The management had recognized that
  - Strengthen squad in depth
  - investment in positions in the 1st team
  - Young players preferably British
  - Budget range





# METHODOLOGY

- **OUTCOME**
  - Finding the 'Market Value' of target players - features/skills in EPL
- **FEATUERES**
  - Age
  - Minutes Played
  - Goals
  - Assists
  - Nationality ( British , EU , World )
  - Position of play (FW , MD , DF , GK )
  - Players current team ( top 6 - other )





# METHODOLOGY

## THE DATA

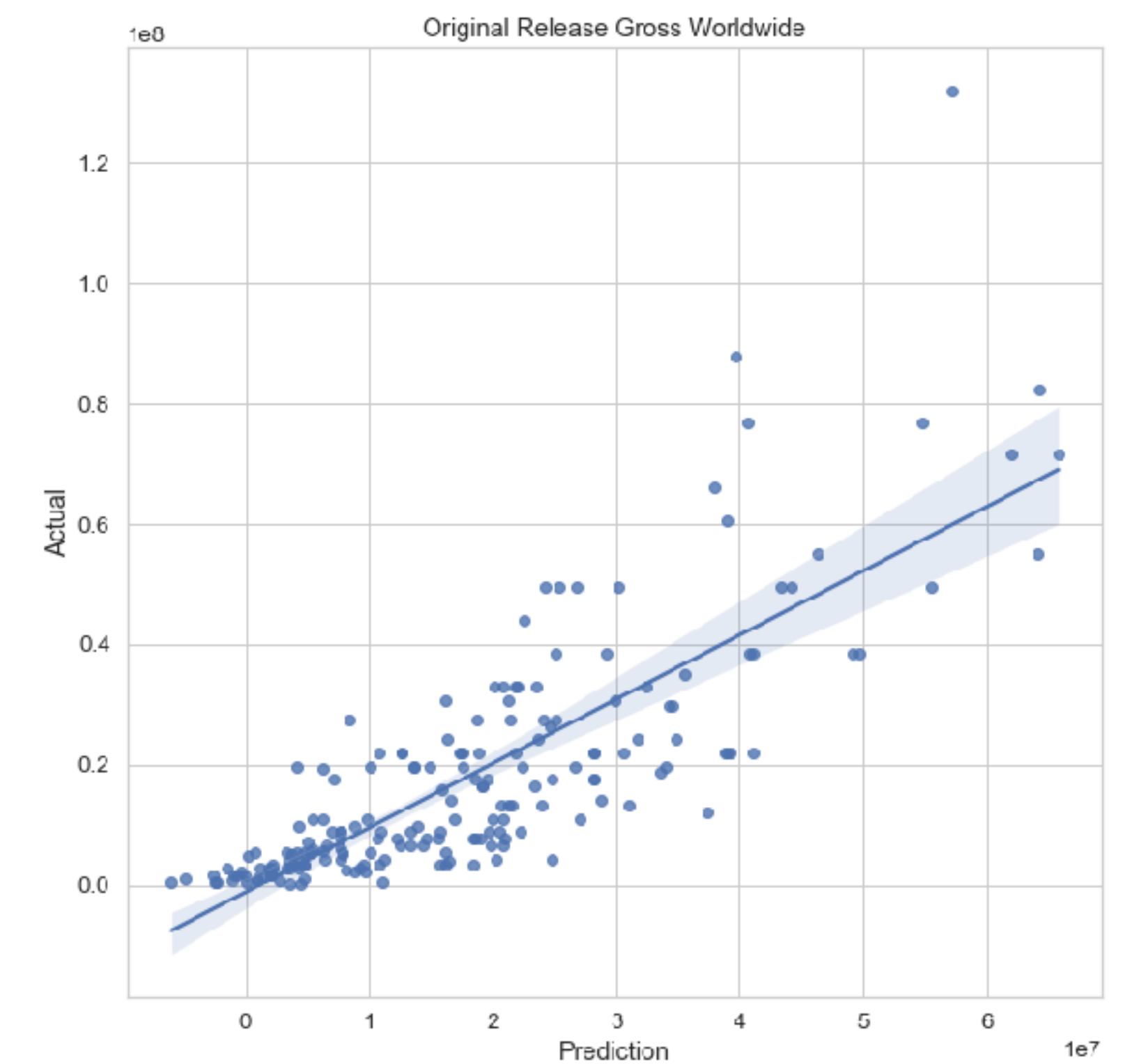
- **WEB-SCRAPED**
  - Player Features/Skills
    - [FBREF.com/Soccer](https://fbref.com/Soccer)
  - Player Market Values
    - [TransferMarket.co.uk](https://www.transfermarkt.co.uk)





# RESULTS

- $R^2 = .645$
- MAE = \$ 7,856,451





# CONCLUSIONS

## RECOMMENDATIONS

- Arsenal management
  - With the help of 'Predicted Values' from regression model:
    - Stayed in budget
    - Entered negotiations for players strong headed
    - Addressed targeted position with your talents





# CONCLUSIONS

## MAIN TARGETS: STRIKER (FW)

- **Dominic Calvert-Lewin (Age 23)**
  - **Everton FC Value \$49,500,000**
- **Arsenal knew he's only worth:**
  - **Predicted Value \$25,606,000**





# CONCLUSIONS

- Arsenal Final Decision
  - Purchase DCL?
  - Trust in their academy youth ?





# FUTURE WORK

- Expand on the features
  - Using another set of data from other websites
  - Generate engineered features in order to raise the  $R^2$

