PLAYER DATA

Name
Fernando Luiz Rosa

Known As
Fernandinho

Date of Birth
04/05/1985

Height
5'10"

Player Work Rate (Attacking /
Medium / High

ferred Foot

EXPLORATORY DATA ANALYSIS ON FIFA 19 PLAYER DATASET

Unlocking insights into player performance, market values, and trends from EA Sports' FIFA 19 dataset using advanced data visualization techniques.

SOUMYAJIT CHAKRABORTY

DATASET OVERVIEW

This dataset encompasses over 18,000 players worldwide, featuring 70+ attributes crucial for scouting, sports analytics, and optimizing career modes.

TRANSFORMING DATA FOR ANALYSIS

Essential steps to prepare data for analysis

- **CONVERT STRING VALUES TO NUMBERS**

  Convert formats like '€105M' into numerical values for analysis.

- **REMOVE NON-ESSENTIAL COLUMNS**

  Dropped columns such as player URL, photo, and ID tags to streamline the dataset.

- **ADDRESS MISSING VALUES**

  Used statistical imputation methods to handle missing data effectively.

- **FEATURE CREATION**

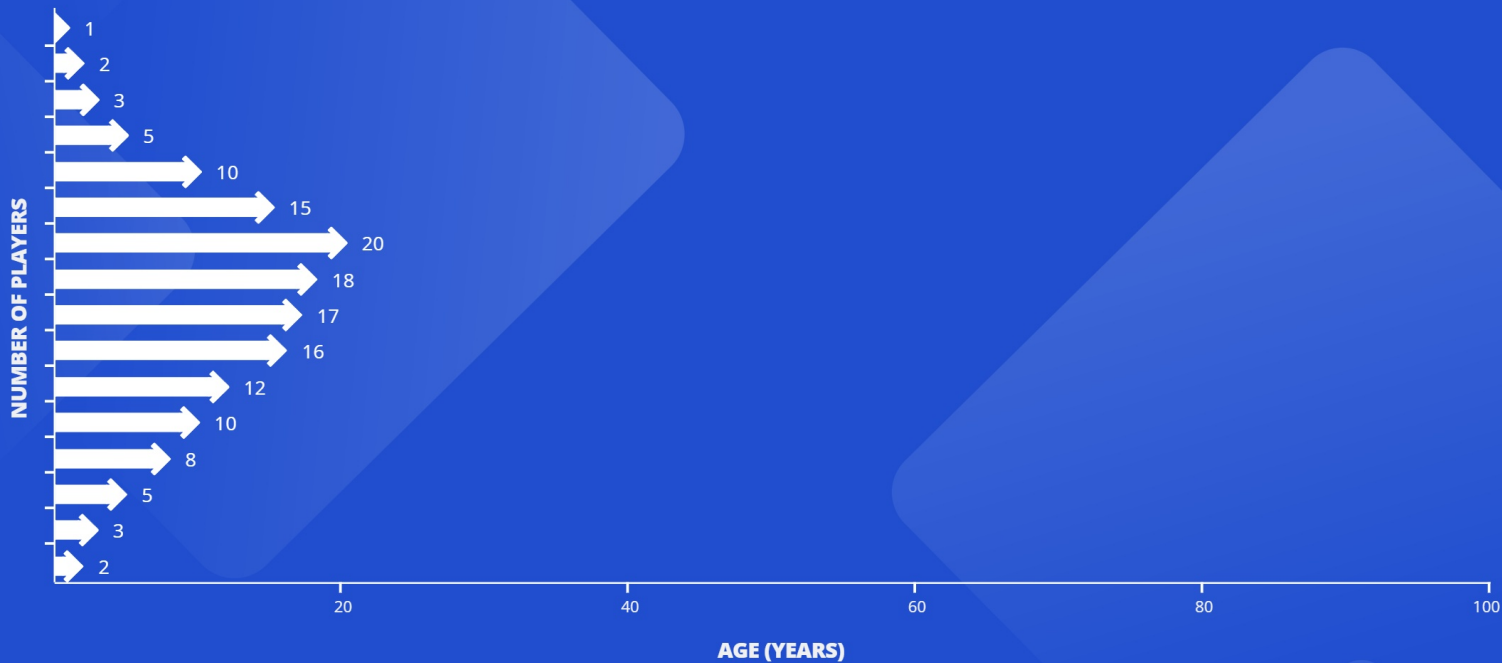 Developed new features like Age groups and Value per Rating for deeper insights.

- **CLEAN KEY ATTRIBUTES**

  Standardized attributes such as Position, Club, and Nationality for consistency.

- **PRIORITIZE DATA INTEGRITY**

  Focus on the data transformation process to ensure accuracy before analysis begins.
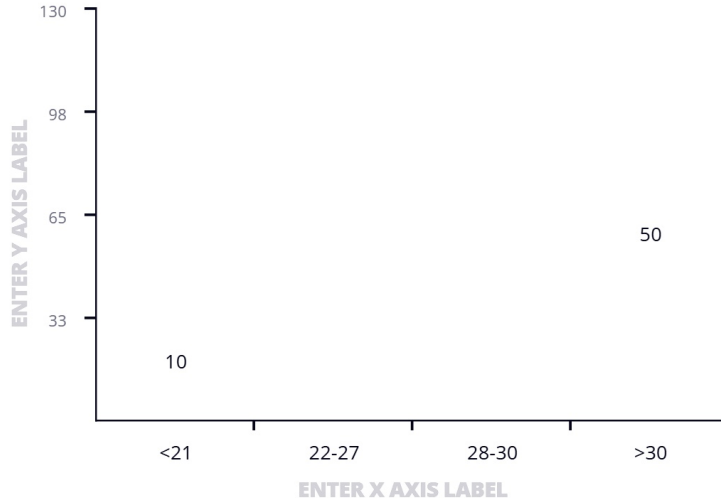
AGE DISTRIBUTION AMONG FIFA 19 PLAYERS

NUMBER OF PLAYERS

1
2
3
5
10
15
20
18
17
16
12
10
8
5
3
2

AGE (YEARS)

20   40   60   80   100

AGE IMPACT ON PLAYER PERFORMANCE TRENDS

Analyzing How Player Performance Evolves With Age

130

98

65

50

ENTER Y AXIS LABEL

33

10

<21   22-27   28-30   >30

ENTER X AXIS LABEL

■ Younger players exhibit significant potential for growth.

Description of a primary heading

■ Overall ratings peak around age 27, suggesting optimal performance.

Description of a primary heading

■ Post-30, both potential and overall ratings tend to decline.

Description of a primary heading
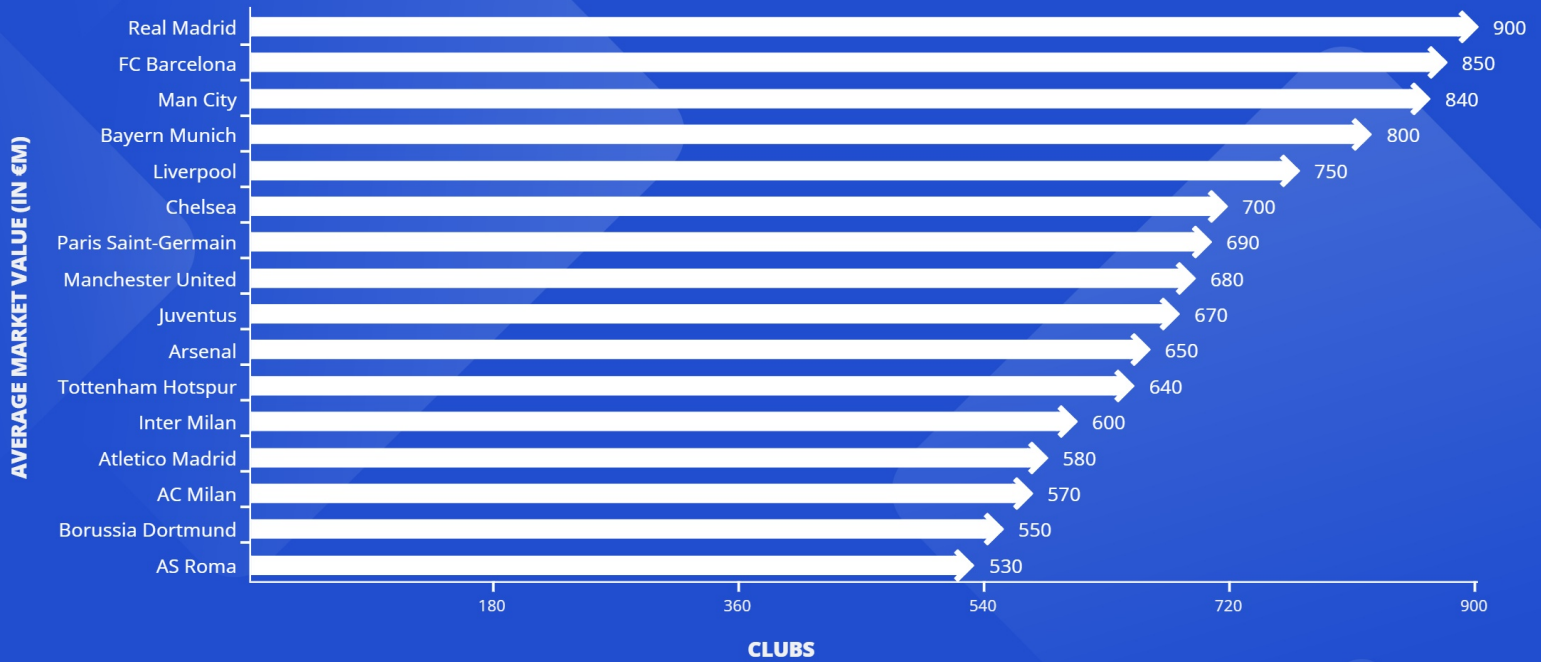
Source: Companies Market Cap

DOMINANCE OF NATIONALITIES & CLUBS

CLUBS

20

15

12

10

25

20

18

NATIONALITIES

20 40 60 80 100

TOP 20 FOOTBALL CLUBS BY MARKET VALUE

AVERAGE MARKET VALUE (IN €M)

Club	Value
Real Madrid	900
FC Barcelona	850
Man City	840
Bayern Munich	800
Liverpool	750
Chelsea	700
Paris Saint-Germain	690
Manchester United	680
Juventus	670
Arsenal	650
Tottenham Hotspur	640
Inter Milan	600
Atletico Madrid	580
AC Milan	570
Borussia Dortmund	550
AS Roma	530

CLUBS

TOP CLUBS BY AVERAGE OVERALL RATING

Consistent Performers in Top Leagues

AVERAGE OVERALL RATING

Club	Rating
Juventus	91
Bayern Munich	90
PSG	89

20 40 60 80 100

CLUB

1 JUVENTUS, BAYERN MUNICH, AND PSG LEAD IN RATINGS.

2 CLUB PERFORMANCE CORRELATES WITH UEFA SUCCESS.

3 BALANCED SQUADS INDICATE FEWER EXTREME OUTLIERS.

GOALKEEPER ATTRIBUTES

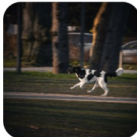Essential skills include reflexes, positioning, and reactions for effective goalkeeping.

DEFENDER SKILLS

Focus on standing tackle, interceptions, and strength to protect against attackers.

MIDFIELDER QUALITIES

Vision, ball control, and short passing are critical for central playmakers.

ATTACKER ESSENTIALS

Finishing, dribbling, and sprint speed are crucial for scoring opportunities.

KEY ATTRIBUTES BY PLAYER POSITION

BUILDING A DREAM TEAM FOR FIFA ANALYSIS

Best Players by Position in Optimal Formation

OPTIMAL FORMATIONS SELECTED

Utilized 4-3-3 and 3-4-3 formations for analysis.

TOP PLAYERS BY RATING

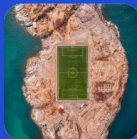Selected players based on their ratings for each position.

CONSIDERATION OF POTENTIAL

Evaluated players based on their potential and club performance.

WORLD-CLASS REPRESENTATION

Balanced team includes representation from world-class players.

CUSTOM FORMATION VISUALIZATION

Provided a visual layout with player names and ratings.

DATA-DRIVEN TEAM BUILDING

Showcases the importance of data in constructing teams.

Created using presentations.AI

DATA-DRIVEN INSIGHTS ON PLAYER ROI

■ YOUNGER PLAYERS YIELD HIGH ROI

Investing in younger players shows the best return due to their growth potential.

■ MARKET VALUE FACTORS

Player market value is shaped by age, potential, and club prestige.

■ ATTRIBUTES FOR POSITIONAL EXCELLENCE

Specific skills and attributes are crucial in determining a player's effectiveness in their position.

■ REAL-WORLD SCOUTING INSIGHTS

Data insights are valuable for both real-world scouting and FIFA career modes.

MAXIMIZE SCOUTING AND PLAYER ACQUISITION

Leverage insights gained from this analysis to enhance scouting strategies and optimize player acquisitions for future success.