

Tableau Project- FIFA Dataset

Problem Statement:

As passionate Manchester United fans eager to excel in the career mode of FIFA18, you seek insights on how to enhance the team's performance and secure prestigious titles like the Premier League and Champions League. Since FIFA18 is very much like that in the real world, gaining meaningful insights from the game can help improve the team and win titles as a manager in the career mode.

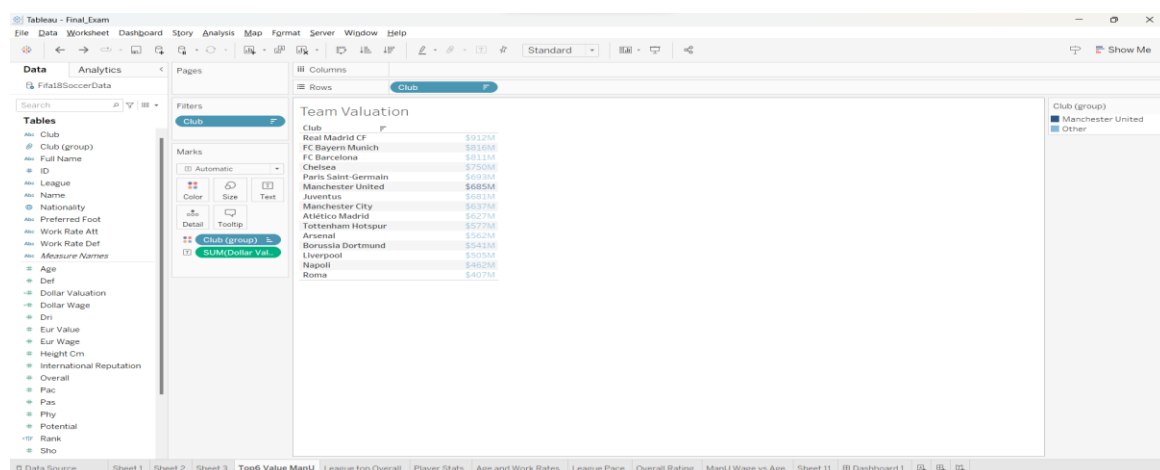
Audience Persona:

Fans of the football club: Manchester United who are eager to play the career mode in the FIFA18 game.

1. A minimum of five visuals of your choosing, built with Tableau.

- For each visual, you must provide a screenshot of the visual and a 6-8 sentence description of the visual. 1-2 sentences must tell the story of the visual as though you are communicating it to your target audience. The remainder of the write up must be devoted to describing how your visual utilizes the design methodologies and audience considerations we discussed in class (such as the Gestalt principles).
- Note:** While more than one visual can be of the same type (e.g., line chart), you must have at least three different chart types across the five required visuals. You are welcome to build more visuals if you find benefit in doing so.

Visual 1:



Inference:

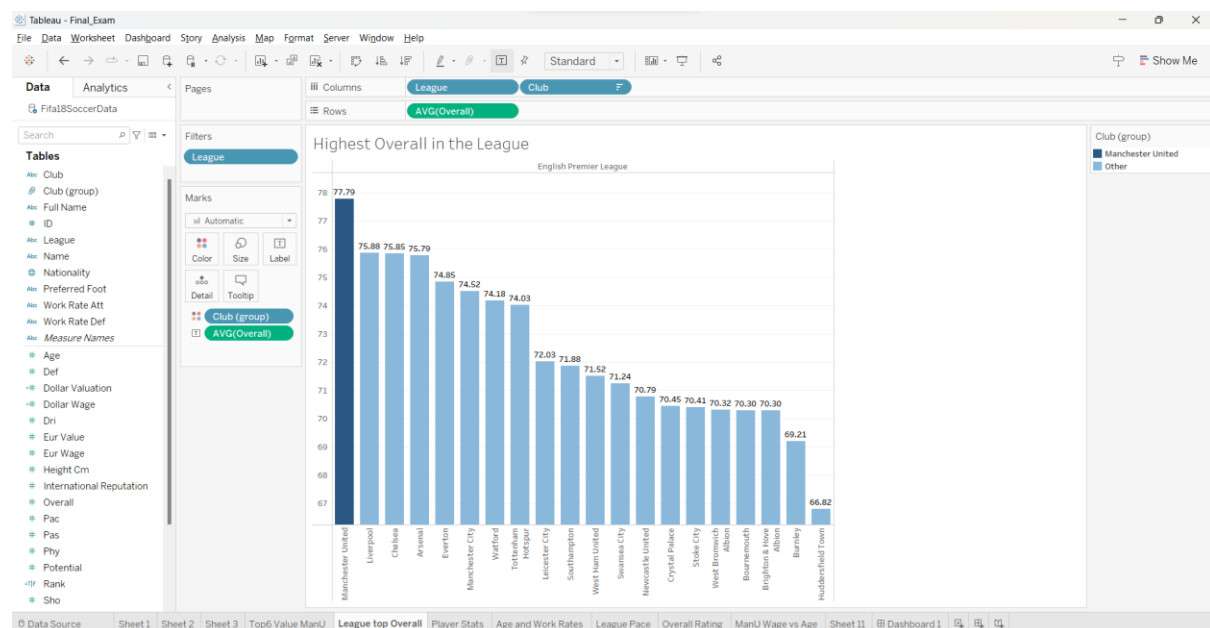
Analysis of the given data reveals that Manchester United ranks as the 6th most valuable football club globally based on player valuations. This suggests that the club possesses substantial financial

resources and boasts top-tier players and matchwinners capable of influencing game outcomes in their favour.

Principles:

We have shaded the Manchester United Field with a different colour. This shows that other fields are not of much importance to us and can be termed similar (non-highlighted information). It is easier to read from the table due to the ranking. The concept of proximity is also used.

Visual 2:



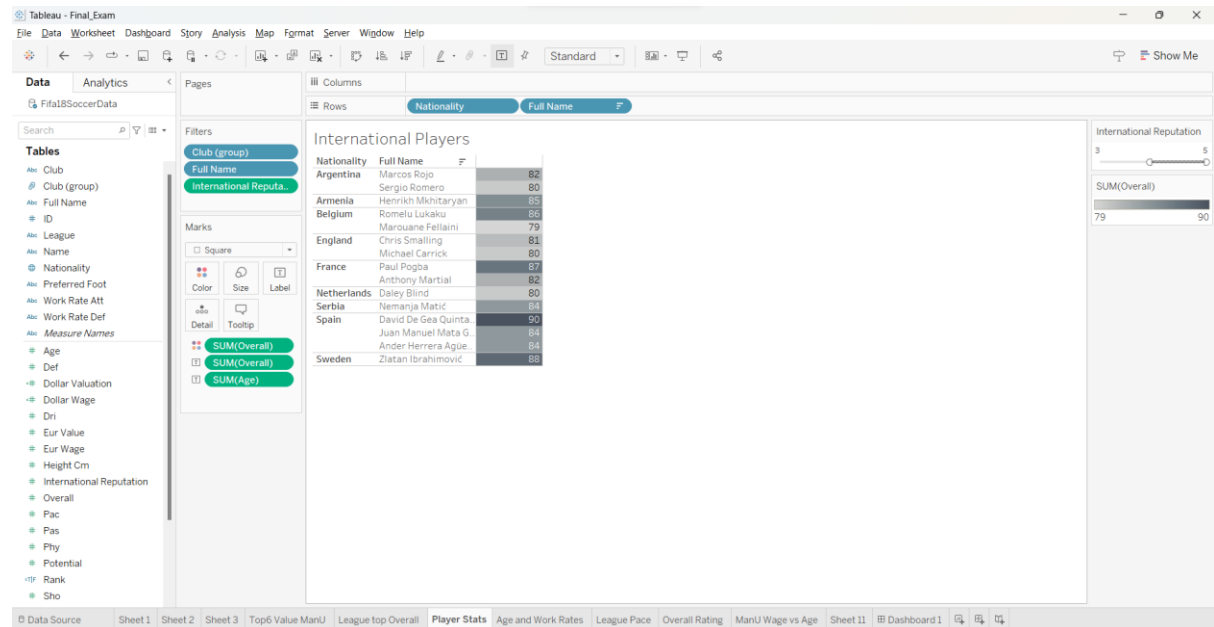
Inference:

Based on the data analysis, it becomes evident that our team ranks among the top-performing teams in the league. The consistently high ratings of our players suggest that they possess a competitive edge, increasing the likelihood of winning the league. Consequently, our AI-operated players are expected to outperform the AI-operated players of opposing teams, giving us a strategic advantage in matches.

Principles:

We have shaded the Manchester United Field with a different colour. This shows that other fields are not of much importance to us and can be termed similar (not highlighted information). I have also rescaled the graph. This is done to emphasise how crucial it is to have a team with good players as one bad player could ruin the game and cost the game for the team.

Visual 3:



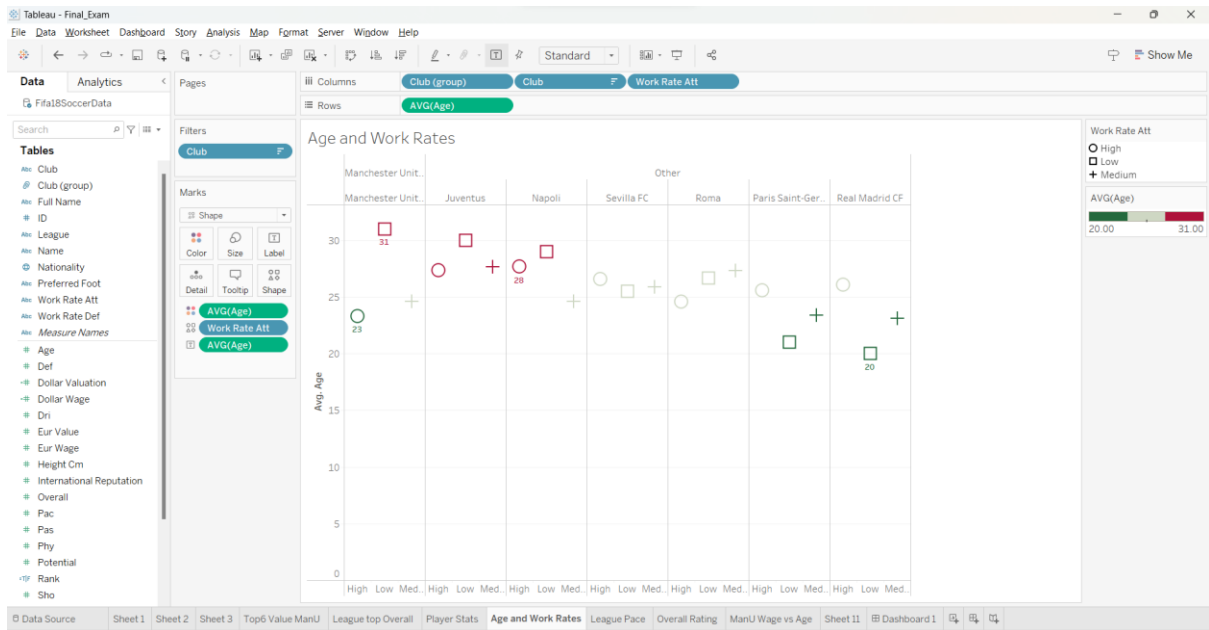
Inference:

The presented chart highlights players who are consistently selected by national teams for prestigious events like the World Cup. The frequency of their selection indicates not only their exceptional skills but also their strong determination to succeed in high-pressure situations. Given their ability to deliver when it matters most, these players are invaluable assets for any team. However, it is crucial to acknowledge the challenges teams face in identifying such promising players capable of handling crucial moments. Having suitable backups for these star players is essential since they may be called up for international duty, leading them to miss league matches during those periods. Ensuring adequate cover for these players will help maintain team performance even when they are absent due to national team commitments.

Principles:

I have used colour visualisation for this chart with shades of grey. The principle of similarity is used as all the players belonging to the same nationality are grouped together. This makes it easier for the audience to find out if there is a diversity and/or chemistry in the squad.

Visual 4:



Inference:

The chart displays player work rates based on age, revealing interesting trends for both Manchester United and Real Madrid CF. For Manchester United, the average age of players with low attacking work rates is 31, indicating the presence of older players who may need to be considered for sale to revitalize the squad. On the other hand, Real Madrid CF boasts a youthful average age of 20 for players with low attacking work rates, suggesting their players have time to develop and improve. Regarding players with high work rates, Manchester United's average age is 23, showcasing a determined and versatile youth squad that can effectively counterattack and drop back when needed. These insights can guide both clubs in making strategic decisions regarding player management and team development.

Principles:

I have used the concepts of similarity and enclosure for this chart. The work rates are visually represented with different shapes. Circle, Square and Plus are used for High, Low and Medium Attacking work rates respectively. All shapes with high ages are coloured as red, those with average ages as grey, while those with low age are coloured as green.

Visual 5:



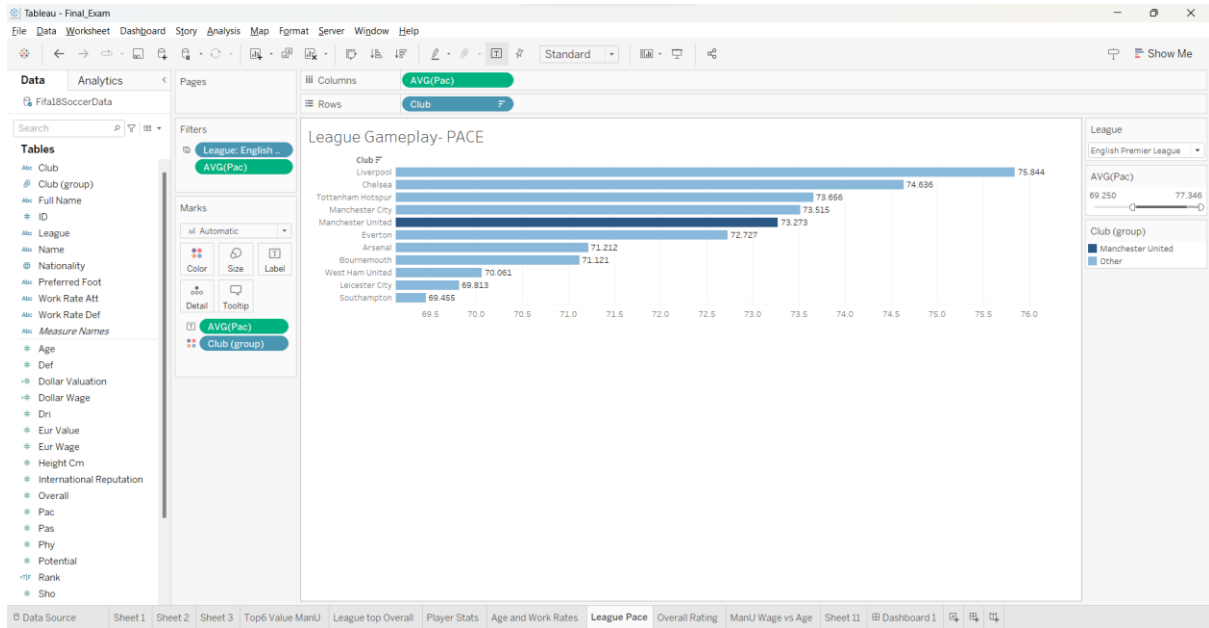
Inference:

The chart depicts player wages in relation to their ages. It's evident that football players generally peak between the ages of 25 to 27, and their performance gradually declines thereafter. To optimize resources, it is recommended to allocate wages based on age and experience. The data point representing players aged 35 with a wage of \$264k could be better utilized by investing in young talents or rewarding players in the average age range with national experience. This strategic reallocation can lead to a more competitive team and maximize the team's potential for success.

Principles:

I have used the concepts of proximity and closure for this chart. There is an outlier in the chart with high wage and older player in terms of age. The wage amount sounds to be too high to be justified for that age. A dashed line for average is also mentioned in the graph. This line helps to clarify what should be the ideal age of a football player that could be given high wages.

Visual 6:



Inference:

The chart displays the average pace of team players in the league. Considering the nature of the English Premier League, where counter attacks play a significant role, having players with high endurance and pace is crucial for success. Matches in the league are unpredictable, and quick counterattacks can be game-changing. To gain an edge over opponents, it's essential to build a team with swift players capable of launching rapid counterattacks. Additionally, having defenders and midfielders who can quickly track back to stop opponents' counterattacks is vital to maintaining a solid defence. Emphasizing speed and agility in team selection and employing effective counterattacking strategies can significantly contribute to dominating opponents and achieving success in the league.

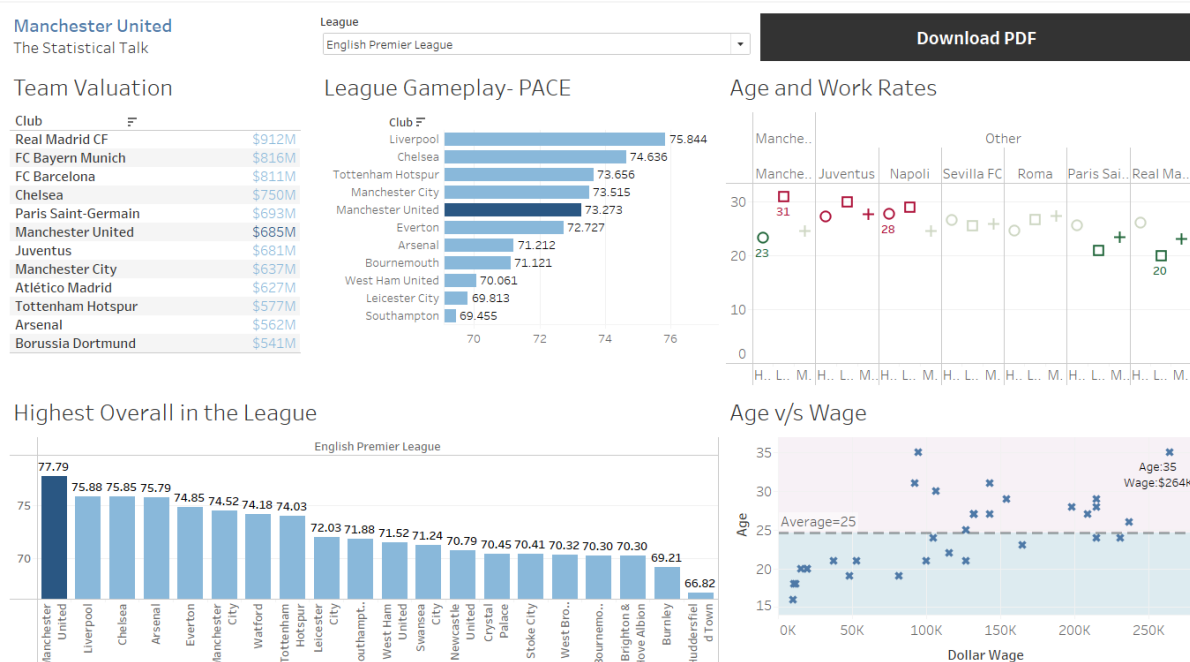
Principles:

We have shaded the Manchester United Field with a different colour. This shows that other fields are not of much importance to us and can be termed similar (not highlighted information). I have also rescaled the graph. This is done to emphasise how crucial it is to have a team with good players as one bad player could ruin the game and cost the game for the team.

2. A dashboard, which combines visuals together to communicate your insights to your audience— there is no minimum number of visuals for this dashboard (though, you should leverage from the five above to make your journey simpler).

- a. You must provide a screenshot of your dashboard, along with a 6-8 sentence description of the dashboard: 1-2 sentences to tell the story and the remainder discussing how your dashboard utilizes the dashboard design concepts discussed in class.

Dashboard:



Inference:

The dashboard insights provide valuable guidance for excelling as a manager in FIFA18's career mode. Manchester United's high ranking in Team Valuations signifies the team's financial stability, boasting star players and match winners. With a strong fifth position in players with high pace, the team can strategically capitalize on quick counterattacks, effectively dominating league matches and FIFA18 games. Furthermore, the highest overall rating reflects a well-balanced squad capable of tackling diverse challenges. However, the graph depicting work rates by age reveals the presence of older players with lower work rates, indicating the need for replacements with young talents possessing higher work rates, following a similar approach to Real Madrid. Additionally, the comparison of age and wages uncovers several players above the average age earning higher wages, potentially becoming a liability. To secure the team's future success, these players should be replaced with promising young talents. In conclusion, starting the career mode with Manchester United presents a safe option, and strategic player changes, along with capitalizing on the team's strengths, will pave the way to more titles and trophies.

Concepts:

The dashboard encompasses various descriptive visuals, including single-valued tables, scatterplots, and bar charts. The tables effectively present the team valuation, allowing easy identification of Manchester United's ranking and overall value. Bar charts provide an alternate representation of data, emphasizing Manchester United's highest overall rating in the league, reassuring fans of their wise decision to choose the team as their starting point in career mode. The chart focusing on team pace highlights an area for improvement, urging fans to consider enhancing this aspect of the team's performance. By rescaling the graph, the emphasis on improvement becomes apparent, encouraging fans to take action to bolster the team's pace. In addition to showcasing Manchester United's advantages, the dashboard also addresses areas for improvement, primarily focusing on player age. Utilizing two charts, one comparing age and the other comparing age with work rates, the dashboard strategically places this important problem on the right portion of the chart. The scatterplot aids in identifying outliers and using different shapes and colours further distinguishes the problem, effectively drawing the observer's attention to the need for addressing player age and work rates.

- 3. An additional 1-page double spaced write up about your process in developing visuals, issues you encountered, insights you were able to derive, and your chosen audience persona. This can include any details you feel appropriate about your journey through the dataset.**

Developing effective visuals to extract meaningful insights from the FIFA18 dataset was a challenging yet rewarding process for me. My primary goal was to create a tailored dashboard for Manchester United fans like me who were eager to start their career mode in FIFA18. Along the way, I encountered various issues while selecting the most appropriate visuals, but in the end, I derived valuable insights to help fellow fans make informed decisions as managers in the game.

Selecting the correct visuals proved to be the trickiest part, and I had to ensure they suit our audience persona. Deciding which insights to prioritize required careful consideration, leading me to change and refine our visuals multiple times. Ultimately, I crafted a total of 11 visuals, striking a balance between showcasing the team's strengths and addressing areas for improvement.

The insights I obtained from the dashboard were enlightening. Manchester United's financial stability and high pace rating positioned them as a formidable team in the league, reaffirming their status as an excellent starting choice. The highest overall rating boosted my confidence in selecting them as my team for the game.

The dashboard highlighted the critical role of pace in successful counterattacks, prompting me to recognize the strategic advantage of leveraging this aspect. The scatterplots effectively illustrated the issue of older players with lower work rates, urging me to consider replacing them with younger talents possessing higher work rates.

As a Manchester United fan eager to embark on FIFA18's career mode, the tailored dashboard looked perfectly suited to the interests and needs. It empowered me to make well-informed decisions as I manage the team in the game as well.

In conclusion, the process of developing visuals for the FIFA18 dataset was fulfilling, equipping me with valuable insights. I am now excited to apply this newfound knowledge to build a competitive and successful team in the virtual world of FIFA18. Armed with the right visualizations, I feel confident in taking on the challenges that lie ahead and leading Manchester United to glory in the career mode.