CONTEXT:

I have taken the FIFA 18 Soccer Data. My story starts with the team FC Schalke 04 where I work as a Data Analyst. We are planning to buy 1-2 players for our defense positions in the team. Therefore, my audience target is our **board**. I have assumed the team budget to be \$50,00,000. Let's start!

DELIVERABLES

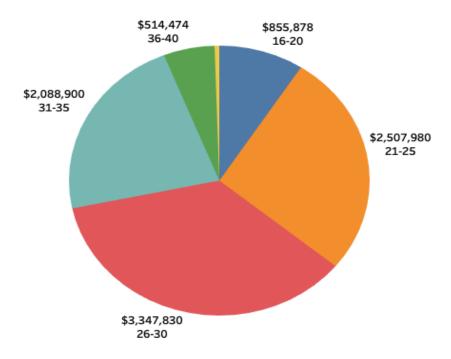
1. **Text Table** representing the number of players in each category of defense rate for the team FC Schalke 04.



We can see that our team has only 5 high caliber players in the defense as compared to the medium caliber players.

I have used a text table to present this data, which is formatted in a structured and organized manner with proper alignment of columns and rows. This ensures that the data is presented in a clear and readable format making it easy for the board members to interpret the information and doesn't waste their time in understanding what the visual is trying to say.

2. **Pie Chart** categorizing into age groups and respective average value of players.

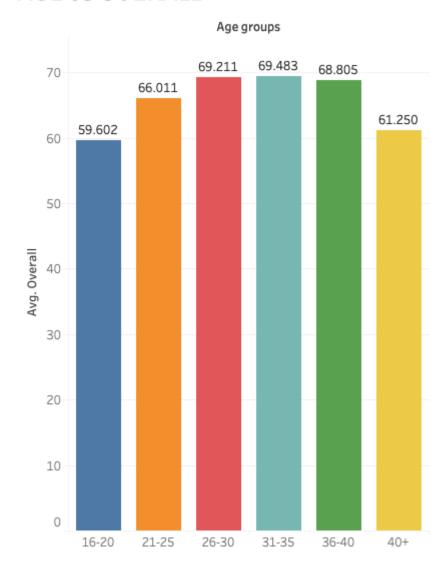


We can observe that the highest average value is from the age group "26-30" followed by "21-25" and "31-35". Until and unless we get a high caliber player in the age group "26-30", we can focus on the other age groups due to the cost.

The pie chart is designed with a small number of categories to avoid clutter and maintain clarity. Each slice is assigned a distinct color to differentiate categories effectively. The colors are chosen to be visually appealing and accessible. Data labels are placed to connect the label with its corresponding slice for better association. The pie chart presents data in a simplified format, which might be appropriate for a quick overview during a high-level presentation to the board.

3. Age vs Overall Bar Chart

AGE vs OVERALL

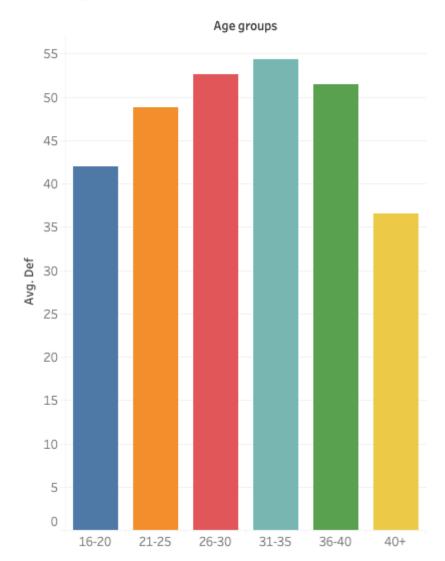


We can observe that the highest overall is from the age group "31-35" followed by the age group "26-30" which also has the highest average value. From this we can shift our focus towards the age group "31-35". We can also try to look into the age group "36-40" as their average value is \$514,474 which is pretty low compared to few others. But here the age factor comes into play.

The bar chart's vertical axis is appropriately scaled to prevent any distortion of the data. This ensures that the audience can make accurate comparisons between different bars. The bar chart effectively displays comparisons between different categories or age groups, making it easy for the board to identify trends, patterns, and areas of interest.

4. Age vs Defence Bar Chart

AGE vs DEFENCE

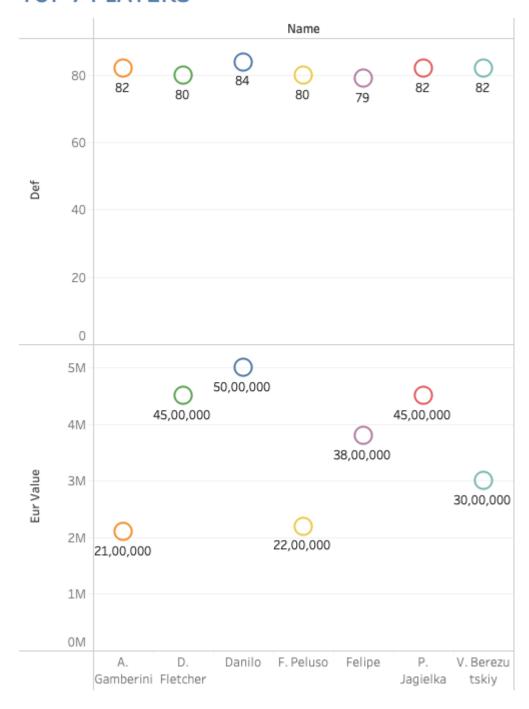


We can observe that the highest defense score is from the age group "31-35". From here, we can conclude that we are gonna focus on this particular age group only.

The bar chart's vertical axis is appropriately scaled to prevent any distortion of the data. This ensures that the audience can make accurate comparisons between different bars. The bar chart effectively displays comparisons between different categories or age groups, making it easy for the board to identify trends, patterns, and areas of interest.

5. Scatter Plot of Top 7 Players following our conditions

TOP 7 PLAYERS



These are the players whose value is under \$50,00,000 and are in the age groups "31-35". We can observe that the player Danilo has the highest defense score of 84. But at the same time, his value is also the highest (\$50,00,000) among the seven. Either we can go with this player if we want to buy only 1 player but if we wanna buy 2 players then we can focus on A.Gamberini and F.Peluso or on A.Gamberini and V.Berezutskiy if we can increase our budget by \$1,00,000.

The axis scaling is appropriately set to ensure that data points are spread out evenly and that the patterns and trends are easily discernible. Data points are styled with a

clear and consistent marker, and color might be used to represent additional information or categories if applicable. The scatter plot is accompanied by explanations or annotations that help the board understand the meaning and implications of the relationships displayed. Outlying data points or extreme values are identified and addressed to avoid potential misinterpretations or assumptions based on anomalies.

DASHBOARD



The dashboard presents a comprehensive analysis of player attributes and costs to aid the board in strategic team-building decisions through five visuals.

The text table follows the design concept of simplicity and clarity, providing a straightforward representation of player distribution based on defense ability.

The pie chart illustrates the distribution of players across different age groups, along with the average value of each age group. The board can easily see the proportion of average values in each age group, providing valuable insights into the potential cost implications of acquiring players.

The two bar charts display the average overall score and average defense score for each age group. They follow design methodologies by using consistent styling, clear labels, and proper scaling to present the data accurately and accessibly.

The scatter plot efficiently showcases the top 7 players whose value falls below the budget limit of \$50,00,000 and belong to a selected age group. It employs interactivity and responsiveness, allowing the board to explore the players' specific details by hovering over the data points.

Creating the visuals for the FIFA 18 Soccer Data dashboard was an intriguing journey that involved several steps, challenges, and moments of insight. The process began with an exploration of the dataset, understanding its structure, and identifying key variables for analysis. The chosen audience persona for this dashboard was the board of a soccer club, aiming to facilitate data-driven decision-making in team-building and player recruitment strategies.

During the development process, I encountered challenges in selecting the most suitable visualization types. For instance, I was only creating bar charts. Then, I had to come up with new ideas to build different kinds of charts such as pie charts and scatter plots. Moreover, I also had a problem creating a pie chart when I was using a calculated field as the measure. I tried to overcome this issue but unfortunately I was not able to. So, I had to go with a non-calculated field (already in the dataset) to create a pie chart. On the positive side, I get to know that each chart has its own requirements (i.e, minimum number of dimensions and measures).

Through the dashboard, several critical insights were derived. The board gained a clear understanding of player distribution based on defense ability, facilitating focused defensive player recruitment. The analysis of average values in different age groups helped the board assess the cost implications of player age, striking a balance between experience and budget constraints. Age-based trends in overall and defense scores offered valuable player development insights. Furthermore, the scatter plot enabled the board to identify talented players within budget limitations and specific age groups, streamlining the recruitment process.

The chosen audience persona, the board of a soccer club, drove the visualization decisions. Understanding their role in strategic decision-making, the visuals aimed to provide a concise yet comprehensive overview of player attributes, age-based trends, and cost implications. By tailoring the visuals to the board's specific needs and preferences, the dashboard aimed to empower them with data-driven insights for building a successful soccer team.