

## Report

FIFA 23, the beloved football simulation game, offers not just entertainment but a rich dataset ready for analysis. With a passion for both the sport and the game, I chose to extract valuable insights from this dataset. This report aims to explore the general insights and trends within the virtual football world. Through statistical analysis and data visualization, we'll uncover the hidden gems within FIFA 23, offering valuable insights for players, managers, and developers alike. Let's dive in and discover what the data has to reveal about the virtual football landscape.

To ensure accuracy in my analysis, I conducted several operations on the dataset using Excel:

1. **Exploration and Understanding:** Meticulously examined the dataset to understand its structure and potential relationships. This involved identifying spelling errors and comprehending the purpose of each column.
2. **Data Cleaning:** Various formatting techniques were applied to standardize the dataset, making it readable and understandable. This included removing duplicates, correcting errors in data entry, and ensuring consistency in formatting.
3. **Integration with Tableau:** Seamlessly integrated the Excel dataset with Tableau for visualization purposes. This integration enabled the creation of interactive and insightful visual representations of the data.

To guide my analysis, the following key questions were formulated:

1. Do the height and weight columns have the appropriate data types?
2. Does the date column have the correct format?
3. Are the value, wage, and release clause columns clean, with the right data types and formats?
4. Have all special characters been removed from the player's name, club, and national team fields?

### Visualization

1. **Average Age by Body Type:** Utilizing a column bar graph, this visualization offers a comprehensive overview of the average age across four body types, enabling the identification of trends in the market based on body types. Insights gained include understanding age distributions and preferences based on body type.
2. **Average Wage by Work Rate:** Displayed as a horizontal bar graph, this visualization highlights the average wage corresponding to different work rates. It provides insights into which work rates tend to attract higher or lower wages, which can significantly impact team performance.
3. **Average Overall by Country:** This dynamic map chart provides a concise overview of the average player overalls across various countries. It offers valuable insights into countries with the best players, aiding in strategic decisions for team composition and scouting.
4. **Average Player Value by Position:** Presented as a column bar graph, this visualization showcases the average player value across various soccer/football positions. It enables clubs to understand market trends and make informed decisions regarding player acquisitions and team strategies.

**Interactive Filters:** To enhance usability, the dashboard features interactive filters for international reputation, weak foot, skill moves. These filters empower customizations of analysis based on specific criteria of interest, ensuring extraction of actionable insights. Whether focusing on player attributes, skill levels, or reputation, these filters provide flexibility and detail in analysis, ultimately enhancing the usability and utility of the dashboard.

## **Conclusion**

In exploring the FIFA 23's dataset, I have uncovered valuable insights into player dynamics, team strategies, and market trends can be used by the public. From body type correlations to wage differentials, the analysis offers actionable insights for players, managers, and developers. With interactive filters enhancing usability, users can tailor their analysis to specific interests. This exploration underscores the power of data to inform decisions and drive innovation in virtual football. These insights can be used to optimize strategies and enrich the gaming experience, ensuring continued excitement and engagement in the digital football realm.