Team USA - Tokyo Olympics 2020(2021)

Here is the link for the Tableau dashboard: [Team USA - Tokyo Olympics](#)

Objective:

Insightful analysis of Team USA's Tokyo Games performance 2020(2021).

Dataset Exploration:

The dataset includes details such as the competition name, competitor's name, event gender, event ID, event name, sport name, NOC (National Olympic Committee) code, NOC name, person ID, person age in days, final rank, result, result type, sport ID, team ID, team members, and team member selection.

Approach:

Here's my structured approach to the project:

1. Identified the stakeholders' needs, particularly focusing on supporting athletes and allocating resources effectively. This involved assessing athlete performance across various areas to enhance support and community engagement.
2. Conducted thorough data exploration, including identifying missing values and understanding data types within each column.
3. Established the theme of the story, prioritizing Team USA's representation across age groups, wins in popular and new games, and gender representation in both Olympic and Paralympic events.
4. Selected quantitative metrics such as participant numbers and event wins to analyze trends effectively.
5. Employed suitable visualization techniques, such as pie charts to illustrate group representation, based on data types and desired trends.
6. Created calculated fields, including age groups and win indicators, to enhance analysis.
7. Analyzed participation and winning trends initially at the Olympics level before delving into specific aspects of Team USA's performance.
8. Implemented clear titles and captions to enhance dashboard readability and provide context for the narrative.
9. Sought feedback from colleagues to identify areas for enhancement, resulting in the incorporation of a universal filter in each dashboard for improved interactivity and user focus on specific metrics.

Learnings:

Through the analysis, I discovered interesting patterns and trends in Team USA's performance at the Tokyo Olympics. Notably, the resilience demonstrated by athletes in the face of the COVID-19 pandemic was evident.

In Tokyo Olympics, 211 countries participated, totaling 15,904 athletes. There were 339 medal events, including male, female, and mixed categories. Team USA had 862 participants, excelling in various popular sports, earning medals in 239 events. New sports like baseball, softball, karate, sport climbing, and surfing were introduced, with Team USA winning 14 medals. Gender-wise, Team USA's medal wins were divided into female, male, and mixed events across both the Olympics and Paralympics. Furthermore, the distribution of USA participants across different age groups revealed that over 70% of medalists were above 40 years old.

Challenges:

The main challenge that I faced for the project completion was that of Data Quality and Completeness.
1) Ensuring data accuracy was crucial. Age was measured in days, encouraging the creation of a calculated field to categorize participants into age groups.
2) Determining event winners posed a challenge. Final rank 1 was assumed to signify victory in the event.
3) Dealing with missing data was another hurdle. Imputing missing values involved using the mean age for the respective country.

Conclusion:

In summary, this report offers a comprehensive overview of Team USA's exceptional performance at the Tokyo Olympics in 2021, despite facing numerous challenges stemming from lockdown measures and the impact of the COVID-19 pandemic. As the leading country in total medals, Team USA's dominance in Athletics and Swimming underscores its unwavering commitment to excellence. Both male and female athletes have displayed remarkable skill and dedication in their respective sports, highlighting the nation's depth of talent. The enthusiastic embrace of newly introduced sports by Team USA athletes has resulted in high participation and success rates.

This project enhances transparency regarding Team USA's Olympic performance, inspiring athletes to strive for greater accomplishments in the future. Aligned with the core values of USOPC, Team USA's performance reflects its dedication to Pursue Excellence, Lead Courageously, Serve Others, and fostering belonging. We commend Team USA for its outstanding contributions to the Olympic Games and eagerly anticipate its continued success in future competitions.