SUMMER OLYMPICS MEDALISTS: A DATA-DRIVEN ANALYSIS

EXPLORING HISTORICAL TRENDS AND KEY INSIGHTS

By: Lorraine Arinaitwe
BSDS, Uganda Chriistian University

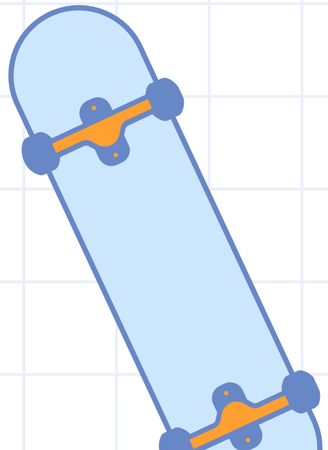
INTRODUCTION TO THE ANALYSIS, DATASET DESCRIPTION, AND OBJECTIVES

This project explores historical trends in Olympic medals, highlighting key insights about top-performing countries, dominant sports, and athlete performance over time.

The goal of this analysis is to uncover patterns in medal distribution, understand factors influencing success, and provide a visual storytelling approach to Olympic history. By leveraging Tableau, we will examine how different countries, sports, and athletes have shaped the Summer Olympics over the years.

HOW SIGNIFICANT IS THE OLYMPICS?

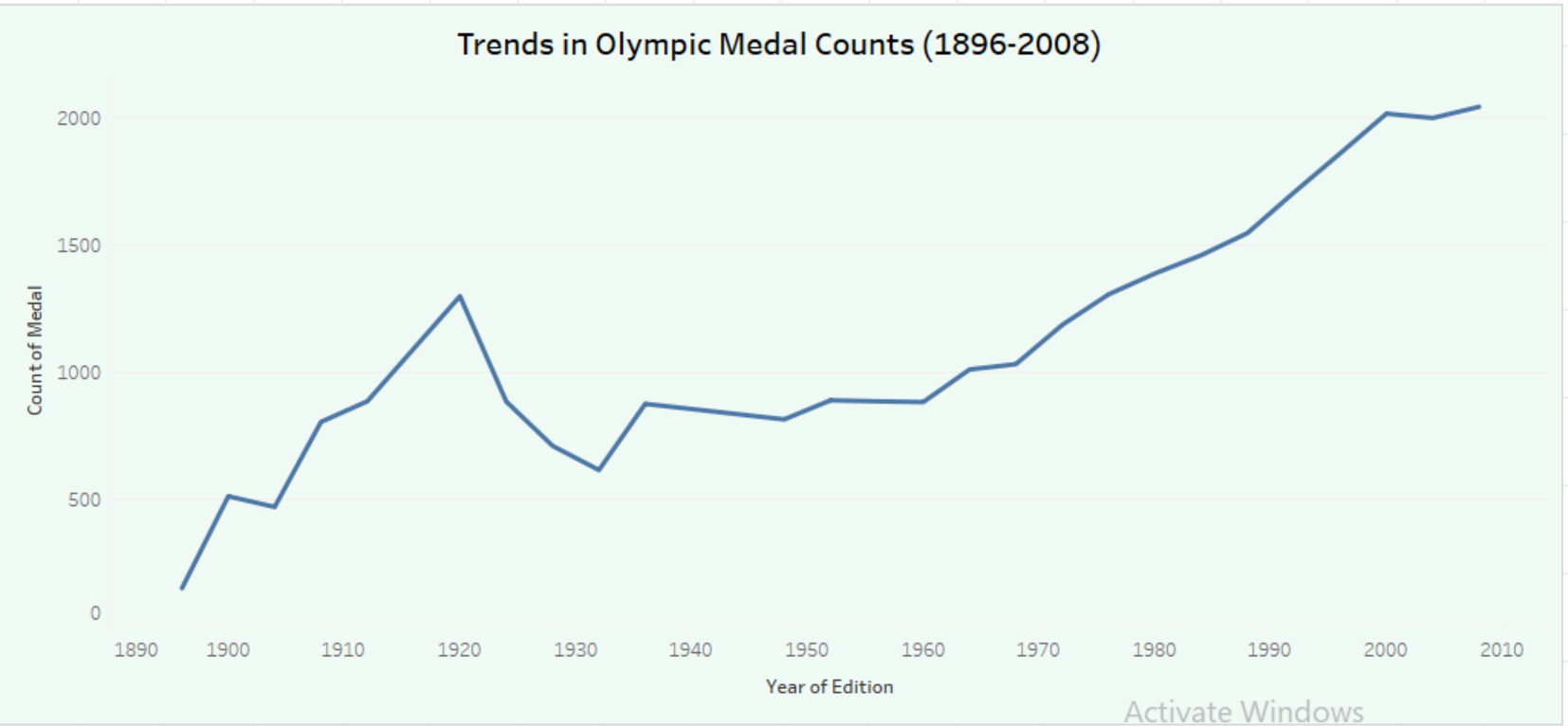
- The Olympics represent the pinnacle of athletic achievement.
- Medals symbolize success, dedication, and national pride.
- This presentation explores the accumulation of Olympic medalists over more than a century.



1896:

The first modern Olympic Games held in Athens, Greece.
Initially featured 13 countries and 43 events.
Over the years, the Games expanded to include more nations, sports, and events.

A GROWTH CURVE OF THE OLYMPICS POPULARITY VIA MEDAL COUNT



There was a gradual increase from 1896-1918 followed by a gradual decline until 1933. It then started to pick up until the early 60's when it sky rocketed.

TWO MAIN REASONS

Global Participation and Inclusivity

Technological and Media Advancement

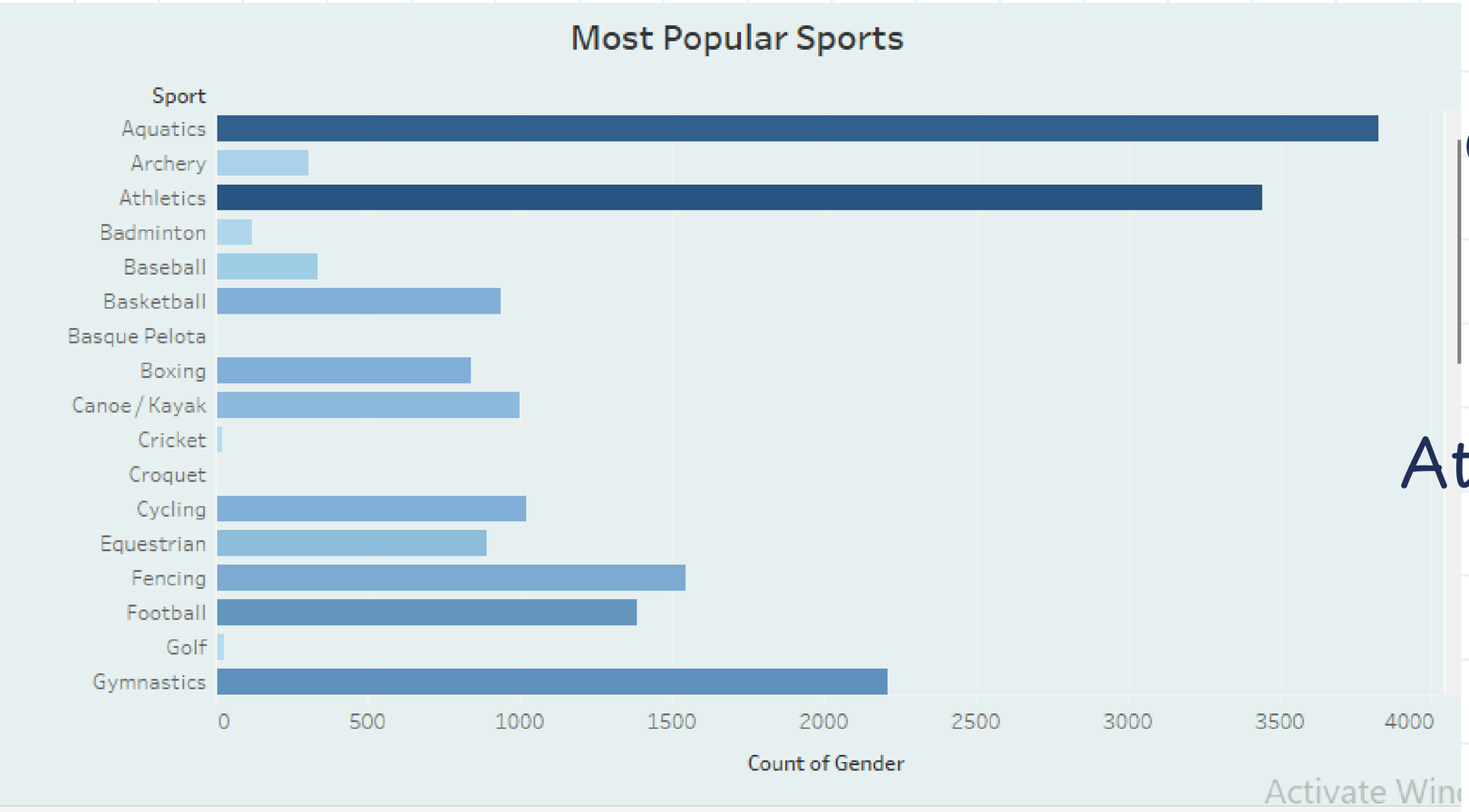
DID YOU KNOW?

World Wars disrupted participation, with Germany banned from the 1948 Olympics, affecting its long-term ranking. During the Cold War, the USA and Soviet Union turned the Games into a battleground for supremacy, heavily investing in sports to showcase national strength. Additionally, the host country advantage has played a role, with nations like the USA (1996) winning more medals due to home support, familiarity with conditions, and increased government investment in athletes and facilities.

DID YOU KNOW?

During the 1960s and 1970s, technological and media advancements greatly expanded the Olympics' global reach and accuracy in competition. The 1960 Rome Olympics marked the first U.S. television broadcast, attracting a 36% audience share, while the 1964 Tokyo Olympics became the first Games broadcast live worldwide via satellite, revolutionizing global viewership. Tokyo also introduced electronic timing to improve precision. By 1968, the Grenoble Winter Olympics aired 90 hours of color TV, reaching 600 million viewers, while introducing electronic timing to a thousandth of a second and anti-doping tests. These innovations cemented the Olympics as a premier global spectacle.

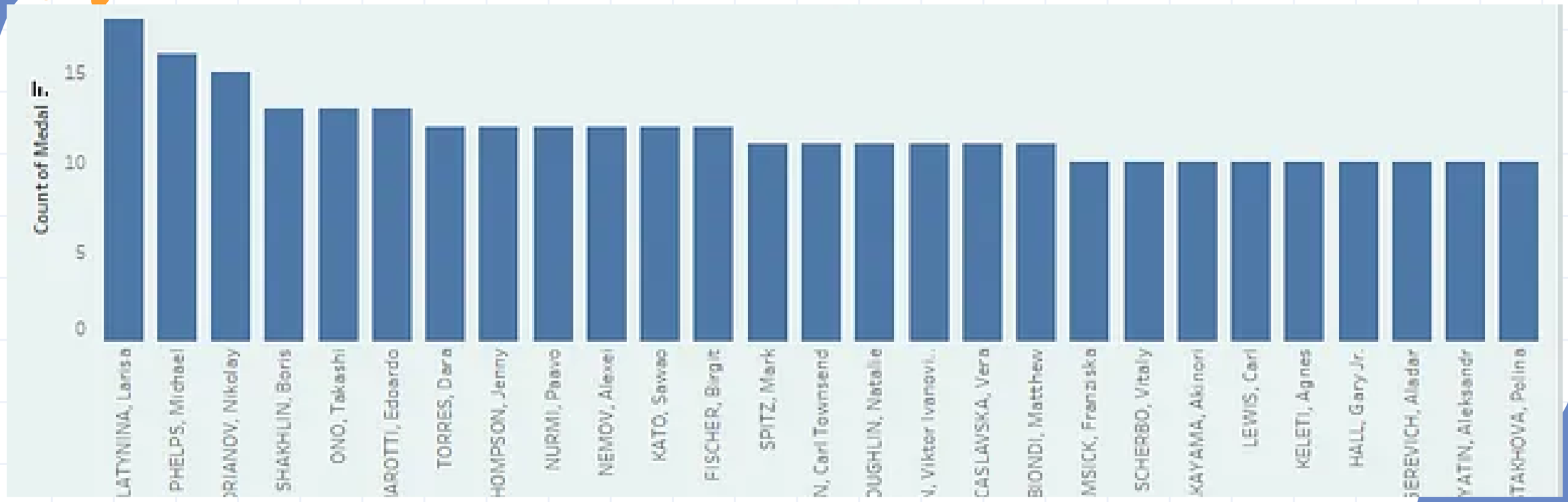
MEDAL COUNTS BY SPORT



The Top 5 sport were Aquatics, Athletics, Gymnastics, Fencing And Last But Not THe Least Football

Athletics and swimming have the highest medal totals. Emerging sports gaining popularity and visibility.

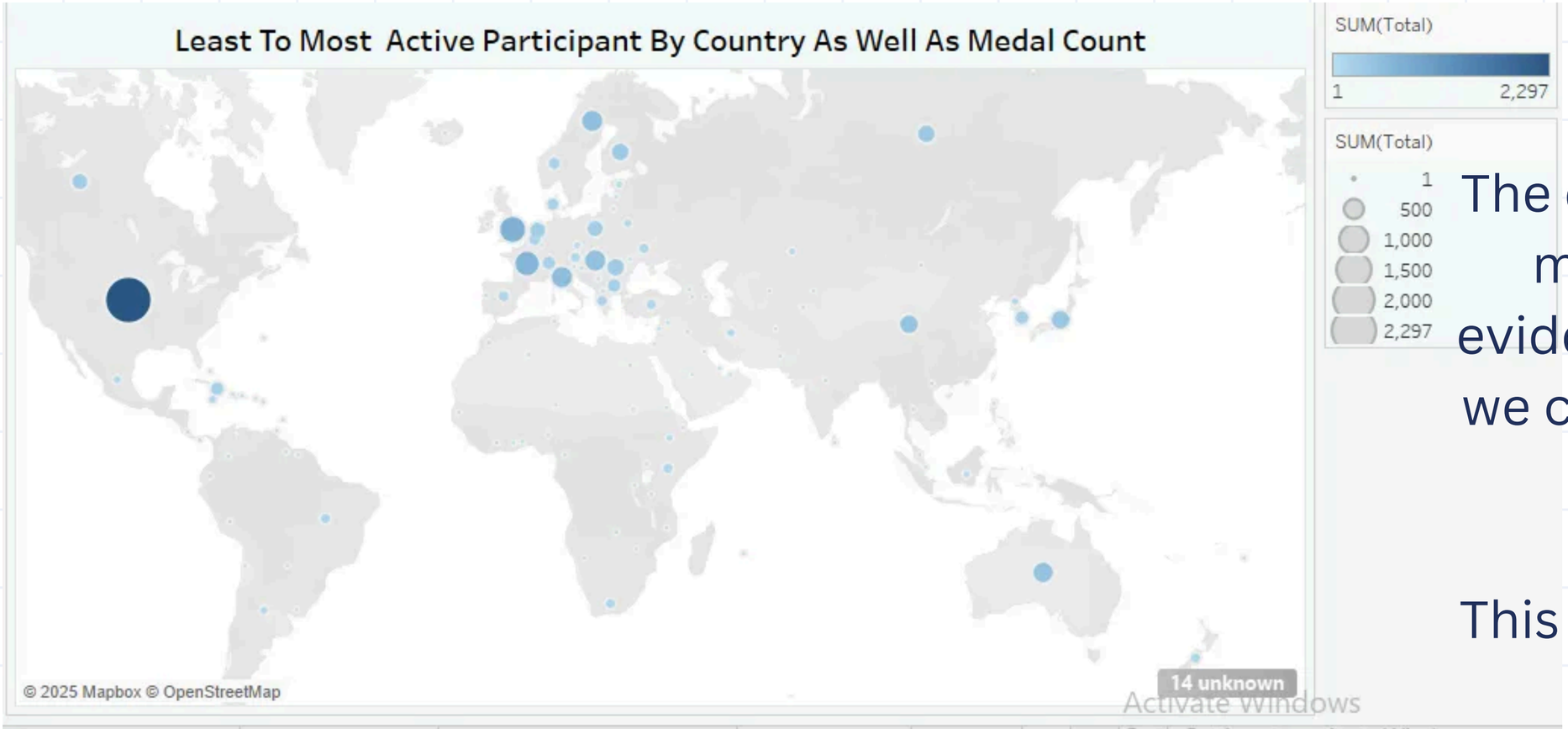
TOP 20 ATHLETES



KEY ATHLETES

- Larisa Latynina: 18 medals in gymnastics with 9 being gold; a pioneer in women's sports.
- Michael Phelps: 16 medals in swimming; known for versatility and dominance.
- Impact of these athletes on their respective sports and global recognition.

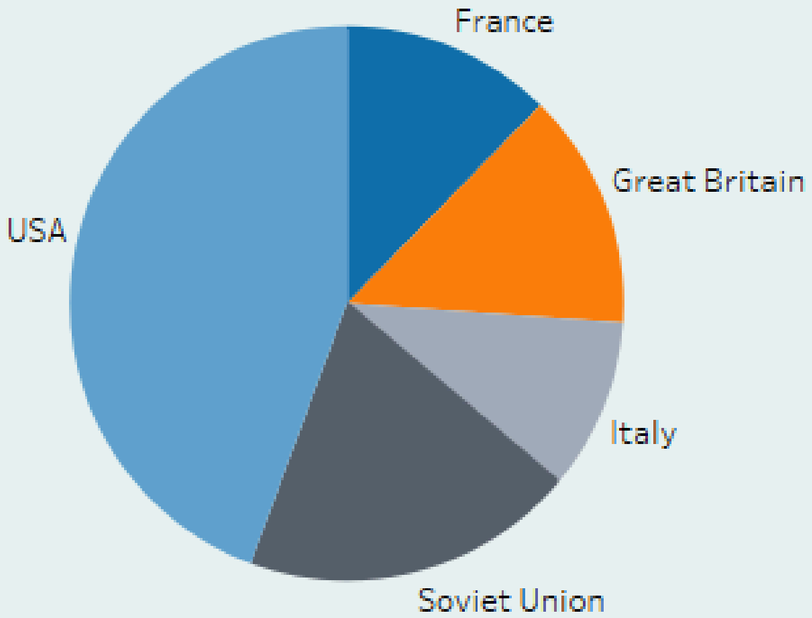
MEDAL COUNT DISTRIBUTION BY COUNTRY (MAP VIZ)



The darker the contrast, the more the medals. USA evidently had the most. But, we can also see that Europe had a collaborative participation.

This communicates a strong unity.

THE TOP 5 COUNTRIES



The USA had a cumulative of 2297 medals, Soviet Union(Russia) had 1010 athletes, Great Britain with 714, France with 638 and finally Italy with 152 total medals.

DATA CHALLENGES AND LIMITATIONS

- Missing Values and difficulty cleaning: Some records have incomplete athlete information (e.g., missing event details, country participation and medal wins like China also won a lot of medals but there was no information), affecting accuracy.
- Inconsistencies: Variations in country names over time (e.g., Soviet Union vs. Russia, West Germany vs. Germany) create challenges in trend analysis.
- Data Gaps: Older Olympics (1896-1920) may have fewer recorded details, making long-term comparisons harder.
- Potential Bias: Data might emphasize dominant nations, underrepresenting smaller countries or less popular sports.

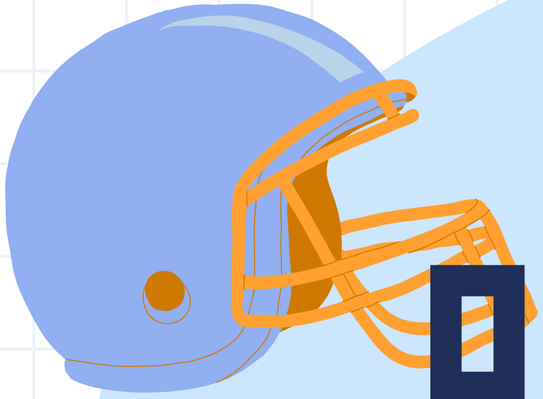
FUTURE RECOMMENDATIONS

- Data Cleaning Strategies: Using interpolation or reference datasets to fill missing values where possible.

- Enhancing Visualizations: Applying filters to focus on complete data or providing disclaimers where gaps exist.

- Further Exploration: Incorporating additional datasets (e.g., athlete biographies, weather conditions) to gain deeper insights.

ANY QUESTIONS?



THANK YOU FOR LISTENING!

For More Information And Understanding:

- Tableau vizzes: https://public.tableau.com/app/profile/lorraine.arinaitwe/viz/SummerOlympicsMedalist_17418764874570/Story?publish=yes
- The Data Set: https://public.tableau.com/app/sample-data/Summer_Olympic_medallists_1896-2008.xlsx
- My Blog: https://medium.com/@lorrainearinaitwe/golden-moments-a-journey-through-summer-olympics-medalists-1896-2008-db4652a76d62