

Capstone Project 1-

Proposal For A Women's International Football Media Dashboard

1. Executive Summary:

The overarching goal of this project is to develop tasteful, all encompassing media dashboards that display the traversal of Women's International Football through history since its inception and identify how the female game has matured into the thriving spectacle that it is today.

Built with Tableau/PowerBI, these dashboards shall use key barometers that help benchmark the eras of the sport and contextualise the rich tapestry of events taking shape over time, rather than lean on raw numbers to convey said events.

2. Problem Statement:

Background: Inadequate awareness and appreciation within the masses towards the scale of how much women's football has grown historically, as well as the perseverance along every step of the way to push through societal boundaries.

Objective: Develop dashboards that explore key metrics to narrate the traversal of Women's International Football through history.

Scope: Initial focus on goalscoring, attendance figures, officiating, sociopolitical and geographical factors, with an eye on their transformation and modernisation.

3. Data Sources:

Primary Data: Archival data from the sports' governing bodies regarding the nations involved, match results, venues and timestamps

Secondary Data: External data sources entailing comprehensive information, including:

- **Expanded Timeline Dataset**- <https://www.kaggle.com/datasets/martj42/womens-international-football-results>
- **World Cup Dataset**- <https://www.kaggle.com/datasets/piterfm/football-fifa-womens-world-cup-1991-2023/code>

Any other references or citations along the project's course shall be obliged and acknowledged within the project itself.

4. Methodology:

Data Integration: Extract and integrate data from aforementioned sources into the data visualisation softwares.

Dashboard Design: Identification of key metrics and barometers to build aesthetic yet cognitive dashboards catering to the target demographic.

Interactivity: Introduce and implement interactive features within the means of the softwares to aid in a comprehensive understanding of the data

5. Expected Outcomes:

- Thought-provoking dashboards supplying key insights into women's football for the masses.
- Increases understanding of the major events spanned across the history of the game.
- Ability to use garnered insights to cohesively assess the future direction in which the sport, particularly the women's side is headed.
- An overall healthier understanding of data visualisation softwares, concepts and the dashboarding process from an analyst's point of view.

6. Tools and Technologies:

- Tableau/Power BI for the front-end visualisation and final output
- Data preprocessing tools for comprehending the raw data, handling any missing observations, feature selection and the overall cleansing of data, namely Excel, SQL and Python.
- Collaboration tools and interfaces for stakeholder feedback after the successful building of said media dashboards.
- Standardisation and optimisation tools to make the data more relatable for stakeholders and general users who may not be well-versed with the domain of football.

Any other tools and technologies shall be duly credited within the project itself.

7. Risks and Challenges:

- Challenging data integration techniques are necessary to overcome integration issues that may occur from the complexity of combining data from several sources.
- Making sure that the raw data acquired from third-part sources, particularly the secondary sources, is accurate and unbiased towards a particular conclusion or demographic so that the stakeholders and users can come to their own, expectantly progressive and rightful conclusions from the dashboards.
- As the data is in relation to women's football, it is important to make sure of the integrity of the project and repent any sort of misogynistic prejudices.
- User adoption challenges for stakeholders and users unfamiliar with Tableau/Power BI, and making sure that the findings translate well to these groups of people no matter their literacy in the usage of these softwares.

8. Conclusion:

Albeit there is a population of people aware of the growth and inadvertent success of women's football in recent years, there is a lot to unpack with respect to the tribulations the sport has overcome in the past. This project will embrace the details within the finer parts of the data it inculcates and look to spread the findings via appealing and comprehensively informative dashboards in a manner where these findings can aid in contextualising the women's football landscape.