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## A Multi-Method Approach: Evaluating Forecasting Techniques For Attendance At The 2034 Fifa World Cup

## Lena Alzhrani, Sarah Osailan and Hasan Balfaqih

Operations and Supply Chain Management Department Effat University Jeddah 21478, Saudi Arabia

leaalzahrani@effat.edu.sa, sosailan@effatuniversity.edu.sa, hbalfaqih@effatuniversity.edu.sa

## **Abstract**

The FIFA World Cup is a significant sporting event that attracts millions of fans worldwide and promotes international friendship. It is essential for host countries to make precise predictions about the expected number of spectators for the 2034 World Cup to enhance preparation and ensure a positive experience for both fans and athletes. The study aims to provide accurate forecasts of attendance turnout at the FIFA World Cup, highlighting various factors that can impact attendance figures. Historical attendance data from the official FIFA website was used, and two weighted moving averages were applied to predict attendance for the 2030 and 2026 World Cups. This study also aims to enhance sports event management by creating a thorough model for predicting fan attendance, such as Bias (BIAS) and Mean Absolute Deviation (MAD) metrics. The study uses prediction models based on past data to forecast occurrences, considering both inputs and outcomes. The accuracy of these models depends on the quality and accessibility of data, the selection of appropriate models, and the validation procedures employed. The outcome helps to ensure that the host country, organizers, and other relevant parties have the necessary arrangements in place to host many international guests and contribute to the World Cup's overall success and legacy.

## Keywords

Attendance prediction model, Predictive analytics, sports, FIFA World Cup