

THE 12'th MAN

- AI Powered Drone for Offside Detection



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INTRODUCTION

- Offside decisions in football often cause controversies due to human errors and delays, even with VAR.
- Traditional methods using ground cameras and manual analysis can be slow and inaccurate.
- An AI-powered drone with aerial footage, computer vision, and real-time tracking ensures instant, accurate offside detection for fairer gameplay.



VIDEO REFERENCE LINK

[Click here to view](#)



PROBLEM STATEMENT

- **Offside detection** in football is often inaccurate and slow, even with VAR.
- Ground cameras and **manual analysis** can cause **delays** and errors.
- **AI-powered drone - The 12'th Man** using aerial footage and computer vision can track players in real time for instant, accurate offside decisions.



PROPOSED SOLUTION

An AI-powered drone referee that hovers above the field, using real-time tracking and deep learning to make instant, precise offside decisions.

Sustainable Development Goals (SDG's) Alignment

SDG 9 – Innovation & Infrastructure

- AI-driven sports technology for accurate officiating.

SDG 12 – Responsible Consumption

- Reduces reliance on fixed VAR systems, promoting energy efficiency.

SDG 13 – Climate Action

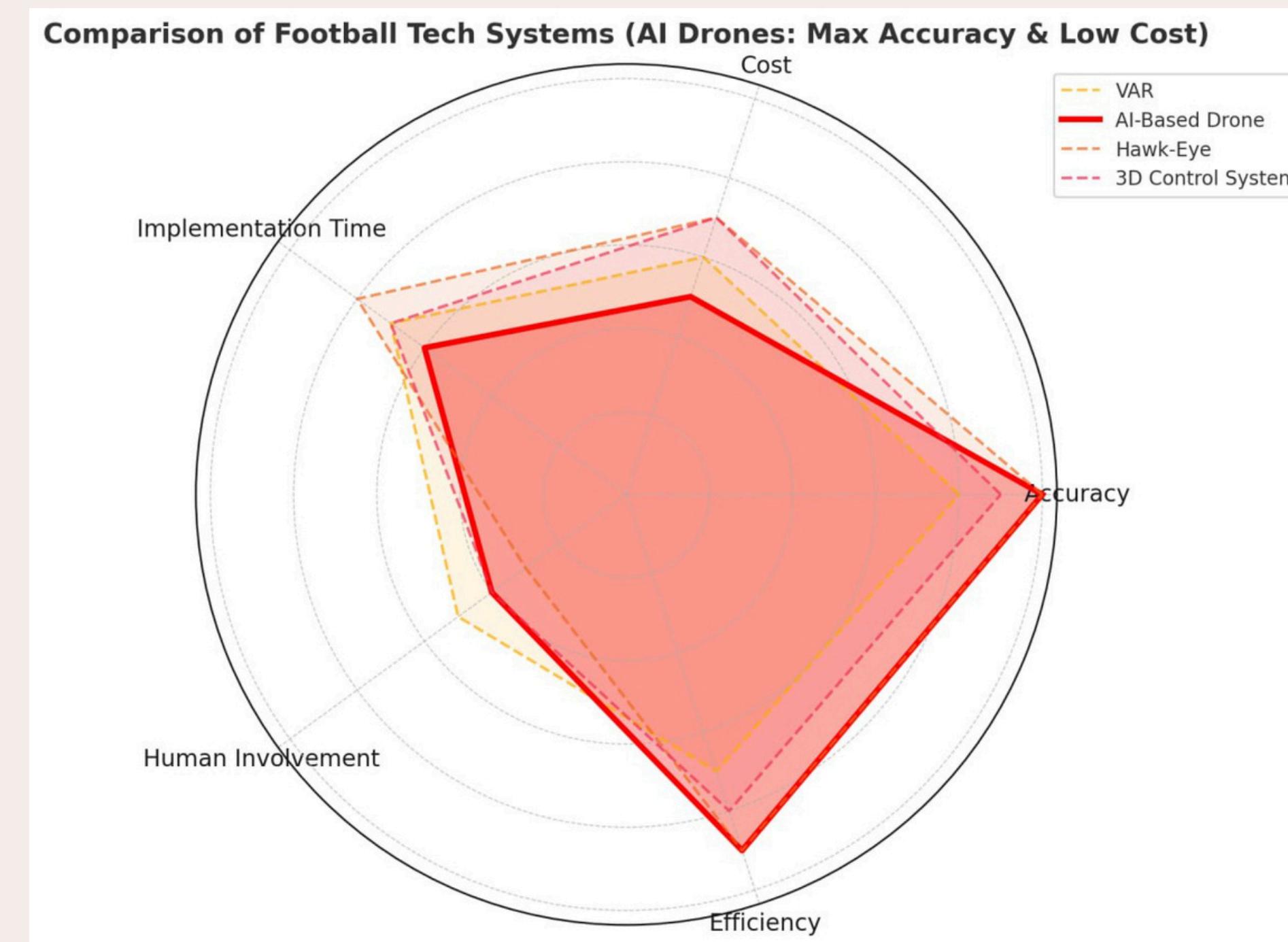
- Uses low-energy AI drones, minimizing carbon footprint.

SDG 16 – Fair & Transparent Institutions

- Ensures unbiased, AI-powered decisions, improving sports integrity.



Graphical Representation of the advantage of AI generated drone for accurate offside detection



CONCLUSION

- The 12'th Man - is a **game-changer** in football officiating, ensuring **accuracy, speed, and fairness**.
- By integrating **AI, Cutting edge surveillance technology, computer vision, and real-time tracking**, it eliminates human errors, reduces delays, and enhances the overall **integrity of the game**.
- Beyond football, this innovation aligns with **Sustainable Development Goals (SDGs)** by promoting **technological advancement (SDG 9)**, **energy efficiency (SDG 12 & 13)**, and **fair play (SDG 16)**.
- This **smart, sustainable, and future-ready solution** revolutionizes sports officiating while contributing to a **more just and eco-friendly world**.



THANK
YOU

