The Future of Sports Industry: AI and Economic Transformations

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1. Round 1

1.1 Reviewer 1

Reviewer:

"The review begins with a historical overview of AI's early applications in sports..." The abstract should also briefly mention the methodological approach used to gather and analyze the data included in the review to give readers a clear understanding of the basis of the conclusions drawn.

"Historically sports were primarily local events with minimal commercialization." Please provide specific examples or data points that illustrate the local nature of early sports events and their minimal commercialization to strengthen this claim.

"AI algorithms process vast amounts of performance data, extracting meaningful insights that help athletes and coaches make informed decisions." It would be helpful to detail the types of performance data analyzed (e.g., biometric, game statistics) and how these insights have concretely improved athlete performance.

"Wearable devices such as smartwatches, fitness trackers, and specialized sensors collect data on various physiological parameters." Please specify which physiological parameters are most critical in predicting injuries and provide examples of successful interventions based on AI predictions.

"AI-powered chatbots and virtual assistants provide fans with real-time information, answer queries, and even predict game outcomes based on historical data." Please include specific examples or case studies of sports organizations that have successfully implemented these technologies and the impact they had on fan engagement.

"AI enhances VR experiences by analyzing real-time data to provide interactive and dynamic environments." The section would benefit from a deeper explanation of how AI and VR are integrated technically and the specific types of data analyzed to enhance these experiences.

Author revised the manuscript and uploaded the updated document.

1.2   Reviewer 2

Reviewer:

"These innovations have not only improved the viewing experience but also provided teams and athletes with invaluable data to optimize performance." Consider adding a citation or a footnote referencing specific studies or technological developments that support this statement.

"AI-driven platforms now offer personalized training programs tailored to individual athletes' needs." Please elaborate on how these platforms gather data and what specific metrics are used to tailor these training programs. Including examples of such platforms and their methodologies would be beneficial.

"AI's ability to analyze global market trends and fan behaviors will enable sports organizations to tap into new markets and grow their international fan bases." This is a critical point; consider expanding on it by providing case studies or examples where AI has successfully expanded market reach in the sports industry.

"Ensuring robust data protection measures and compliance with data privacy regulations is crucial to address these concerns." It would be beneficial to mention specific regulations or guidelines (such as GDPR) and how they apply to AI applications in sports.

"Ensuring fairness and transparency in AI models is essential to prevent such biases." Include examples of potential biases that could arise in AI models used in sports and suggest specific measures or methodologies to detect and mitigate these biases.

"The sports industry must navigate these changes by investing in workforce reskilling and creating pathways for employees to transition into new roles." Consider adding specific strategies or programs that have been effective in other industries for managing the transition to AI-driven roles.

"The regulatory landscape for AI in sports is evolving." This section should include a discussion on how current regulations are being implemented in practice and any major challenges or gaps that need to be addressed.

"Teams employ AI algorithms to analyze match footage, tracking player movements and identifying tactical patterns." Provide a detailed example of a soccer team that has successfully implemented AI for performance analysis and the specific benefits observed.

Author revised the manuscript and uploaded the updated document.

2.   Revised

Editor's decision after revisions: Accepted.
Editor in Chief's decision: Accepted.