

REVIEWER'S REPORT

Manuscript No.: IJAR-59385

Title: AI-Enabled Fire Detection and Predictive Safety Monitoring for Smart Buildings in Saudi Arabia under Vision 2030: A State-of-the-Art Review and Framework

Recommendation:

Accept as it is

Accept after minor revision.....√.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		√		
Techn. Quality		√		
Clarity		√		
Significance		√		

Reviewer's ID: JPR-302

Reviewer's Comment for Publication:

The manuscript provides a relevant and well-structured review of AI-enabled fire detection and predictive safety monitoring for smart buildings, with a useful focus on the Saudi Arabian context and Vision 2030. The integration of computer vision, multimodal sensing, BIM, digital twins, IoT, predictive monitoring, cybersecurity, and lifecycle assurance is clearly discussed. The proposed layered architecture and emphasis on maintaining deterministic fire-safety systems alongside AI are valuable. However, minor revisions are recommended to improve the manuscript. The authors should carefully check and complete the references and ensure that all cited studies and regulatory requirements are accurately documented. The presentation of the proposed framework and tables/figures should also be checked for consistency and clarity. Some lengthy paragraphs may be shortened to improve readability, and the distinction between established evidence and the authors' proposed framework should be made more explicit. Subject to these minor revisions, the manuscript has good relevance and potential significance for research and practical applications in smart-building fire safety.