

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_129667
Title of the Manuscript:	Technological Progress And Engineering Applications: Safety Impacts For Workplaces And Society”
Type of the Article	

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This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript provides a critical exploration of the evolving intersection between technological advancements and workplace safety, particularly within the context of Industry 4.0. By adapting financial models like the Black-Scholes-Merton to industrial risk assessment, the study offers innovative methodologies that could revolutionize how industries approach safety management. Furthermore, the incorporation of real-world data, case studies, and empirical validation adds significant credibility to the findings, making it a valuable contribution to both theoretical and applied research in industrial engineering and safety sciences. The research also underscores the importance of integrating emerging technologies and advanced risk modeling techniques, offering valuable insights for improving safety standards and decision-making processes in dynamic environments.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title "Technological Progress and Engineering Applications: Safety Impacts For Workplaces and Society" is fairly descriptive but could be made more precise to better reflect the specific content and focus of the manuscript, which revolves around industrial safety, the application of the Black-Scholes-Merton model, and its empirical validation. I propose changing the title to "Impact of Technological Advancements on Workplace Safety: Risk Assessment and Engineering Applications"	

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<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract effectively outlines the core areas of the research, but there is room for improvement in terms of providing more specific details. For instance, while it mentions the adaptation of the Black-Scholes-Merton (BSM) model for industrial safety, it would be helpful to briefly indicate the mixed-methods approach used, which integrates both qualitative insights and quantitative models. Additionally, highlighting the empirical validation through real-world case studies and simulations is important as it strengthens the credibility of the findings. Incorporating these aspects would make the abstract more comprehensive, while also emphasizing the significance of the study's implications for real-world applications and future research. Finally, mentioning the potential impact of this research on advancing industrial safety in dynamic technological contexts would provide a clearer picture of the study's broader relevance.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript demonstrates a strong scientific foundation, particularly in the application of the Black-Scholes-Merton (BSM) model to industrial safety risk assessment. The adaptation of this financial model for assessing risks in the context of modern industrial environments, such as those impacted by Industry 4.0 technologies, is novel and well-explained. The methodology is sound, combining qualitative and quantitative approaches, and incorporates simulations and sensitivity analysis to evaluate the model's robustness and performance in real-world settings. However, some areas would benefit from additional clarification and detail to ensure scientific rigor. For example, while the manuscript emphasizes the importance of real-world validation, further elaboration on the specific challenges encountered during data collection and pilot study implementation could strengthen the discussion. Additionally, more context around the limitations of the BSM model in non-financial applications would provide a better understanding of its potential shortcomings in industrial risk evaluation.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references included in the manuscript appear to be relevant and well-chosen, focusing both on fundamental financial concepts (e.g. the Black-Scholes-Merton model) and its adaptation to industrial security applications.</p>	
<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language and overall quality of the article are generally suitable for scholarly communication. The manuscript is clear, and the technical concepts are conveyed with an academic tone appropriate for a scientific audience.</p>	
<p>Optional/General comments</p>	<p>The manuscript demonstrates a promising approach to integrating financial models, such as the Black-Scholes-Merton model, in the context of industrial safety and risk assessment within Industry 4.0 environments. The methodology applied, combining qualitative insights with quantitative analysis, is robust and provides valuable interdisciplinary insights into the real-world application of advanced technologies. Overall, the research presented in the manuscript has strong potential for making a significant contribution to both the fields of industrial safety and financial risk assessment.</p>	

PART 2:

	<p>Reviewer's comment</p>	<p>Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</p>
<p>Are there ethical issues in this manuscript?</p>	<p>(If yes, Kindly please write down the ethical issues here in details)</p>	

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