

**Review Form 3**

Journal Name:	<a href="#">Journal of Engineering Research and Reports</a>
Manuscript Number:	Ms_JERR_127583
Title of the Manuscript:	Optimization of Kmeans, Kmedoids, and Kshape Using Intelligent Optimization Algorithms
Type of the Article	Research Article

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**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> <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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The article is useful since it addresses frequent clustering issues, such as difficulties managing high-dimensional data and sensitivity to cluster initialisation. I like that the paper offers both a sound theoretical framework and workable methods that may find application in actual fields like industrial operations and e-commerce.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes, the article's title is appropriate as it makes it apparent that the main goal is to optimise Kmeans, Kmedoids, and Kshape utilising clever optimisation techniques.	
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.	The issue, suggested remedy, and important findings are all succinctly summarised in the abstract, which is typically thorough. However, a few adjustments may make it better: Although dimensionality reduction and the use of intelligent optimisation methods are mentioned in the abstract, the special benefits or contributions of the suggested framework are not mentioned. The abstract would be strengthened by include a sentence discussing its uniqueness or how it differs from current approaches. The idea would be more powerful and tangible if a particular improvement metric (such as runtime reduction or silhouette score) was included.	
Are subsections and structure of the manuscript appropriate?	Yes, the manuscript's structure and subsections make sense and flow logically. Beginning with the introduction and goals and progressing through the mathematical framework, suggested technique, and experimental findings, the material is logically divided into parts that gradually deepen the reader's comprehension.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	Because it improves on well-established clustering techniques with precise optimisation algorithms like SSA, DBO, and SCA that are backed by exacting mathematical definitions, this paper is scientifically sound. Problems with high-dimensional data are successfully addressed by incorporating dimensionality reduction techniques. The framework's functionality and technical soundness are confirmed by experiments on benchmark datasets using suitable metrics, such as runtime and silhouette scores.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	The manuscript's references are pertinent and include seminal studies on optimisation techniques (like SSA and SCA) and clustering (like Kmeans). Nevertheless, a number of the references seem out of date, including those from 1999 and the early 2000s, which might not represent the most recent developments in clustering and optimisation methods. Adding more current research, especially within the previous five years, would make the manuscript more credible and relevant.	

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<p>Minor REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p><b>The article's linguistic quality is typically acceptable and suitable for academic discourse. Minor edits are necessary to enhance flow and clarity, though. There are a few grammar mistakes and difficult phrasing that need to be fixed, and several phrases might be made simpler for easier reading. The overall appearance of the paper would be improved by proofreading and editing for consistency in terminology and style (such as abbreviations and technical phrases). The language quality will satisfy the requirements for academic communication with these small changes.</b></p>	
<p>Optional/General comments</p>	<p><b>Although the article presents an intriguing structure, there is need for further emphasis on the originality. It would be beneficial to specifically mention how this strategy varies from or enhances current approaches found in the literature. More visualisations of the experimental data, such as clustering heatmaps, convergence graphs, or the outcomes of various optimisation strategies, might improve their readability and persuasiveness.</b></p> <p>Although dimensionality reduction and algorithm integration are helpful, the framework's originality is not adequately highlighted.          Suggestion: Describe how this framework differs from earlier studies that employ comparable dimensionality reduction or optimisation techniques. Emphasise any special features of the suggested approach.</p> <p>Although thorough instructions for SSA, DBO, and SCA are given, readers who are not familiar with these techniques may find them overwhelming.          Suggestion: Shorten the explanations and highlight how the techniques relate to clustering optimisation.</p> <p>Though common, the Wine dataset used in the experiments might not adequately illustrate the framework's capacity to manage intricate, large, or real-world datasets.          Suggestion: To improve the generalisation of results, use more datasets with different levels of complexity.</p> <p>Although criteria like duration and silhouette score are employed, other metrics (such as the Dunn Index and Davies-Bouldin Index) might improve the assessment.          Suggestion: To offer a comprehensive evaluation, use more varied performance measures.</p> <p>The findings are supported by figures and tables, although additional visualisations (such as cluster heatmaps and convergence curves) might enhance the depiction of optimisation method performance.          Suggestion: Use these to illustrate clustering quality and convergence speed graphically.</p> <p>Some of the sources seem to be out of date (for example, 1999 clustering approaches).          Suggestion: To strengthen the paper's applicability, update references with current research.</p> <p>The phrase "Recent studies have explored intelligent optimisation algorithms..." and a few more minor errors might be fixed.          Suggestion: Check for flow and grammatical mistakes.</p>	

**PART 2:**

	Reviewer's comment	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><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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