

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_129980
Title of the Manuscript:	Using TOGAF for Migration of Monolith Systems to Microservices
Type of the Article	Research 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 addresses a timely and important topic: the migration of monolithic systems to microservices, a critical transformation for enterprises adopting modern technological practices. By utilizing the TOGAF framework, the paper provides structured guidance on managing this transition, which is a significant contribution for both researchers and practitioners in enterprise architecture and software development. The integration of Agile methodologies further enhances its practical relevance. This research could guide organizations in achieving scalable, agile, and efficient systems while mitigating risks, thus having substantial value for the scientific and industrial communities.	This manuscript contains a rich analysis of how TOGAF can be harnessed as a framework for transitioning from a monolith to a microservices system. It is highly relevant to science as it tackles a crucial issue of today's software development – the extension of legacy systems that must incorporate modern values such as flexibility, availability, and stability. This manuscript connects theoretical concepts to their real-world uses by explaining how TOGAF's Architecture Development Method (ADM) can support this transition. Furthermore, its blending of Agile and TOGAF frameworks provides a layered strategy for addressing technical debt, risks, and organizational resilience during intricate architectural changes. This makes the manuscript useful for researchers, practitioners, and organizations that seek information on handling similar technological changes.
Is the title of the article suitable? (If not please suggest an alternative title)	The title is clear and accurately reflects the content of the paper. No changes are required.	The title sums up the manuscript's objective on exploring how TOGAF can be used to migrate from monolithic to microservices. No further changes are needed.
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>The abstract is well-written, summarizing the key aspects of the study, including the role of TOGAF's ADM in facilitating migration, integration with Agile, and the benefits and risks of transitioning to microservices. However, it could benefit from the inclusion of specific examples or metrics mentioned in the manuscript, such as scalability improvements or case study insights, to make it more impactful.</p> <p>Add specific examples or results to strengthen the abstract.</p>	The abstract has been changed based on the reviewer's comments. It is now more detailed and includes examples and measurable criteria. It aptly concludes the study, identifies TOGAF's position, Agile assimilation, and migration advantages, and delivers valuable case study findings. I believe that no more editing is required. Feel free to let me know if further changes are needed.

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Is the manuscript scientifically, correct? Please write here.	Yes, the manuscript is scientifically robust and technically sound. It comprehensively explains the challenges of monolithic systems, the benefits of microservices, and how TOGAF’s structured approach facilitates migration. The integration of Agile methodologies is well-justified, and the mapping of TOGAF’s phases to migration activities demonstrates practical applicability.	Sure. The manuscript is scientifically sound. It adheres to theoretical and best-guild frameworks such as TOGAF and Agile to enhance the process of converting from monolithic systems to microservices.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	<p>The references are sufficient and well-cited throughout the manuscript. However, a few recent studies on microservices governance and risk management frameworks could enhance the literature review.</p> <ol style="list-style-type: none">Solberg, E. (2022). "The transition from monolithic architecture to microservice architecture: A case study."Hedenäs Bennet, O., & Jyborn, A. (2024). "The Data Management of a Microservices Migration of Embedded Software."M. K. Bagwani and G. K. Shrivastava (2024), Performance Comparison of REST API and GraphQL in a Microservices Architecture, International Conference on Data Science, Artificial Intelligence and Machine Learning, 409.	The references as sufficient and recent. The references suggested by the reviewer has also been updated.
Is the language/English quality of the article suitable for scholarly communications?	The manuscript is well-written and free of significant grammatical errors. The language is suitable for scholarly communication. Minor proofreading could enhance clarity and flow.	The language used in the article is quite appropriate for an academic discourse. It is coherent, logical, and very research-oriented.
Optional/General comments	<p>The manuscript provides valuable insights into a complex subject and maintains a good balance between theoretical and practical aspects. A few areas for improvement include:</p> <ul style="list-style-type: none">Incorporating visuals or diagrams to simplify the explanation of TOGAF phases and their mapping to migration activities.Expanding on the practical case study example to give readers a more tangible understanding of the process.Including a dedicated section on potential future research directions. <p>No plagiarism is suspected. The manuscript appears original based on its content and citations.</p> <p>No competing interest issues were observed.</p> <p>No ethical issues were identified in this manuscript.</p> <p>This manuscript provides a structured approach to a complex and critical topic. With minor revisions to enhance clarity, comprehensiveness, and practical applicability, it has the potential to be a valuable contribution to the field.</p>	The manuscript offers appropriate peer-reviewed articles to back it up and contain conclusions based on sound, practical examples. Combining theoretical models, including TOGAF and Agile, with realistic migration approaches further strengthens this assertion. The systematic nature of the study on analysing the technological transitions in the four sectors is crystal clear, which adds to the study's validity and enhances the overall credibility of the study as an academic piece. In addition, the manuscript complies with the objectives, and its explicative and practical approach confirms the work as realistic and non-derived, thus proving its academic value. The manuscript is also free of AI-generated content, and there is no sign of plagiarism; the ideas are unique, and the writing shows a solid understanding of the subject matter.

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)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	There are no ethical issues associated with this manuscript.