# Article information:

Incorporating Project Complexities in Risk Assessment: Case of an Airport Expansion Construction Project | Journal of Management in Engineering | Vol 38, No 6
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# Article summary:

1. Complexities are considered a major source of risks in construction projects, and risks may turn to complexity-creating elements and propagate additional risks through a bidirectional interaction.

2. A tailored approach is required to manage complexities holistically without ignoring their interactions with risks, and the proposed approach entails the integrated usage of risk registers, risk breakdown structures, and complexity-incorporated risk-influence diagrams along with the utilization of a previously developed complexity assessment framework.

3. Incorporating complexities in the earlier stages of a project would lead to improvement in the assessment of risks, and the proposed approach has the potential to contribute to improved risk management in complex construction projects.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article "Incorporating Project Complexities in Risk Assessment: Case of an Airport Expansion Construction Project" published in the Journal of Management in Engineering presents a practical approach to incorporate project complexities in the risk assessment of complex construction projects. The article highlights the relationship between project complexity and risk, and how they can affect project success. The proposed approach involves using conventional risk assessment tools and methods along with a previously developed complexity assessment framework.

The article provides a comprehensive review of the literature on project complexity, risk-complexity relationship, and risk management. However, there are some potential biases in the article that need to be considered. Firstly, the authors assume that complexities are usually assumed to be given or embedded in such projects. This assumption may not always hold true as complexities can arise due to various factors such as changes in scope, design modifications, and unforeseen events.

Secondly, the article focuses on large-scale dynamic construction projects without considering smaller projects that may also have complexities and risks. This narrow focus may limit the applicability of the proposed approach to other types of construction projects.

Thirdly, while the article acknowledges that there is a lack of consensus on how to conceptualize project complexity, it does not provide a clear definition or framework for understanding project complexity. This lack of clarity may lead to confusion when applying the proposed approach.

Fourthly, while the article proposes an integrated approach for incorporating complexities into risk assessment, it does not explore potential counterarguments or limitations of this approach. For example, it is unclear how this approach would work in situations where there are multiple stakeholders with conflicting interests.

Finally, while the article notes that risks may turn into complexity-creating elements and propagate additional risks through bidirectional interaction, it does not provide concrete examples or evidence for this claim. This lack of evidence weakens the argument for incorporating complexities into risk assessment.

In conclusion, while "Incorporating Project Complexities in Risk Assessment: Case of an Airport Expansion Construction Project" provides a useful approach for incorporating complexities into risk assessment, it has some potential biases and limitations that need to be considered. The article could benefit from a clearer definition of project complexity, exploration of potential counterarguments, and more concrete examples or evidence to support its claims.

# Topics for further research:

* Definition of project complexity in construction projects
* Risk management strategies for smaller construction projects
* Stakeholder management in complex construction projects
* Limitations of integrating complexities into risk assessment
* Examples of risks turning into complexity-creating elements in construction projects
* Best practices for managing unforeseen complexities in construction projects

# Report location:

<https://www.fullpicture.app/item/a89adb8eca72e913a2b262d4cd7e05e8>