

Evaluation of risks using 3D Risk Matrix

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ABSTRACT: Concerns and criticism are raised from Risk Management (RM) workshop facilitators and participants regarding the limitations of the current methodologies as well as the subjective nature of the outcomes. These concerns impede the acceptance of RM workshops and the actual process.

This paper introduces the concept of 3D Risk Matrix, risk prisms and pyramids and the methodology for analysing risks according to the position of their 3D 'coordinates'.

Comparison of results between the common 2D analysis and the proposed 3D concept will prove how the latter improves the decision making process, as well as supporting RM facilitators and participants to consider simultaneously a combination of factors, for example likelihood, impact on time and cost and thus achieve acceptance of the outcome (reducing subjective decision making).

The proposed methodology will also improve visualisation, communication and understanding of the RM workshop inputs as well as outputs.