

Paper Title: Quantitative risk assessment - application, myths and future direction

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Abstract:

The development of quantitative risk assessment (QRA) methodologies has advanced to such a state that it is now a practical risk management tool in geotechnical engineering. Pilot applications of QRA have shown great promise and it has contributed to addressing questions that would otherwise be very difficult to answer using conventional techniques. In practice, there is still much resistance against the more widespread use of QRA and this is partly due to myths about the technique. The essence is the application of risk-based thinking, be it under a quantitative or qualitative framework. The geotechnical community stands to gain by integrating risk-based thinking and methodologies into current geotechnical practice. Such integration will better align the geotechnical profession with many of the other engineering fields that practise risk management in a more explicit manner.