A theoretical holistic risk management model for mining operations

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ABSTRACT

Risk is inherent in many human activities, endeavors and business enterprises. One of the causes of mining related enterprise failure is the inability to reliably assess/manage risk holistically. Although it is difficult to establish a proactive decision-making policy for risk in mining operations an Operational Risk Management (ORM) methodology is probably the best vehicle towards that goal. A hypothetical scenario is developed utilizing ORM in order to illustrate how risks can be managed. This scenario describes a conceptual project evaluated by the same imaginary risk evaluators under specific risk pillars. Risk evaluation involves the assessment of risk probability and risk severity. Through this scenario this paper will try: (i) to establish a baseline ORM process that will be applicable to any mining operation environment, and (ii) to provide a theoretical example to demonstrate how the method can be applied to mining operations.