



Front-end strategies to reduce project risks

By Steve Rusk

Mining projects are complex, multi-stage endeavors that involve significant capital expenditure and carry inherent risks. The front-end of a project, from exploration to development, is critical in identifying and mitigating these risks. This article explores three key strategies to reduce project risks at the front-end: well-understood priorities, integrated evaluation, and completing each stage before proceeding to the next.

Understanding the order of magnitude impact

The first strategy is to establish well-understood priorities. This involves defining the project's goals and objectives, and identifying the key risks that could impact the project's success. By understanding the order of magnitude impact of these risks, project managers can prioritize their efforts and allocate resources accordingly. This approach ensures that the most significant risks are addressed first, reducing the overall project risk profile.

When cost, schedule, and quality decisions are made in silos

The second strategy is to integrate evaluation. This involves bringing together all relevant stakeholders, including engineering, geology, and finance, to evaluate the project's risks and opportunities. By working in silos, project managers may miss critical risks and opportunities, leading to cost overruns, schedule delays, and quality issues. Integrated evaluation ensures that all risks are identified and addressed, leading to a more comprehensive and accurate assessment of the project's viability.

Start with a holistic view of decision outcomes

The third strategy is to complete each stage before proceeding to the next. This involves ensuring that each stage of the project is completed and evaluated before moving on to the next. By completing each stage, project managers can identify and address risks as they arise, rather than waiting until the end of the project. This approach ensures that the project remains on track and that risks are minimized throughout the entire lifecycle.

1. *Well understood priorities* A project manager should define the project's goals and objectives, and identify the key risks that could impact the project's success. By understanding the order of magnitude impact of these risks, project managers can prioritize their efforts and allocate resources accordingly.
2. *Integrated evaluation* Project managers should bring together all relevant stakeholders, including engineering, geology, and finance, to evaluate the project's risks and opportunities. By working in silos, project managers may miss critical risks and opportunities, leading to cost overruns, schedule delays, and quality issues.
3. *Complete each stage before proceeding* Project managers should ensure that each stage of the project is completed and evaluated before moving on to the next. By completing each stage, project managers can identify and address risks as they arise, rather than waiting until the end of the project.

By following these three strategies, project managers can significantly reduce the risks associated with mining projects. Well-understood priorities, integrated evaluation, and completing each stage before proceeding to the next are essential for ensuring the success of any mining project. Project managers should implement these strategies from the very beginning of a project to minimize risks and maximize the chances of a successful outcome.

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