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Specialists in Strategic, Enterprise and Project Risk Management

RISK MANAGEMENT FOR RESOURCE COMPANIES

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Resources companies today tackle many of the same tasks as they did a decade ago – they find, extract and process minerals and hydrocarbon products. However, major changes have taken place in the commercial aspects of resources projects and the risks associated with them.

The world-wide drive towards higher shareholder returns and the fact that the easy pickings have already been worked over mean that projects are becoming increasingly marginal and risky. To make marginal resources economically viable, the scale of developments is increasing and investors have to accept larger exposures before they see a return.

With the scale of investments rising and more aggressive shareholder expectations, businesses face greater risks than they did in the past. This climate of increasing risk is here to stay and investors and developers need to understand how to deal with it.

Whether assessing a project for a bankable feasibility study or undertaking a due diligence investigation, project and business evaluation are not as clear cut as they would have been in the past. Then, technical feasibility was the main concern and a simple investment analysis was adequate. In today's business climate, technical uncertainties must be integrated with marketing, financial and economic issues, making the whole process more complex.

Fortunately, systematic methods for dealing with risks have improved dramatically over the last decade and there are now established techniques for examining risks and their implications for a business. The key point about these techniques is not just what they do but also how efficiently they operate. Analyses that might have absorbed more effort than a project could afford can now be planned and implemented within agreed time and cost constraints to suit the scale of a business.

Broadleaf has been at the forefront of these developments, refining well-established methods to make them cost-effective. Building on the Standard AS/NZS 4360, Risk Management, simple project risk reviews can be planned and implemented to deliver a meaningful result in a relatively short time, typically one or two days of a project team's effort. The time of the project team itself is usually the most expensive component of such an exercise and it is important to ensure that this resource is used as effectively as possible. The Standard offers an approach to prioritising risks with a diverse range of impacts: technical, financial, environmental, safety, community relations and so on.

Quantitative risk analysis that used to require heavy computing power has become accessible to anyone with a PC and the right skills. With the proper techniques, it is possible to draw all the risks in a project together within a single financial and economic analysis. This lifts an integrated view of the uncertainty affecting a project out of the realm of 'gut feel' and unsupported judgement and into a transparent and clearly documented analysis.

Broadleaf has used analyses of this type in a range of large resource projects. Some of these have involved:

- Gold resource development and mine extensions;
- Economic evaluation of minerals processing plants, including some using innovative new technology;
- Reliability of gas supply for a mineral extraction business;
- Choice of smelter technology;
- Plant and equipment hazard studies;
- Operational audit of the risk management processes and models used by Ok Tedi Mining Limited in their mine waste management project.

The scope and capabilities of current risk management approaches provide significant opportunities for business managers and project sponsors to improve their decisions and ensure their resource projects provide better returns.

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