

Setting up for Success

Challenges in Exploration and Project Valuation



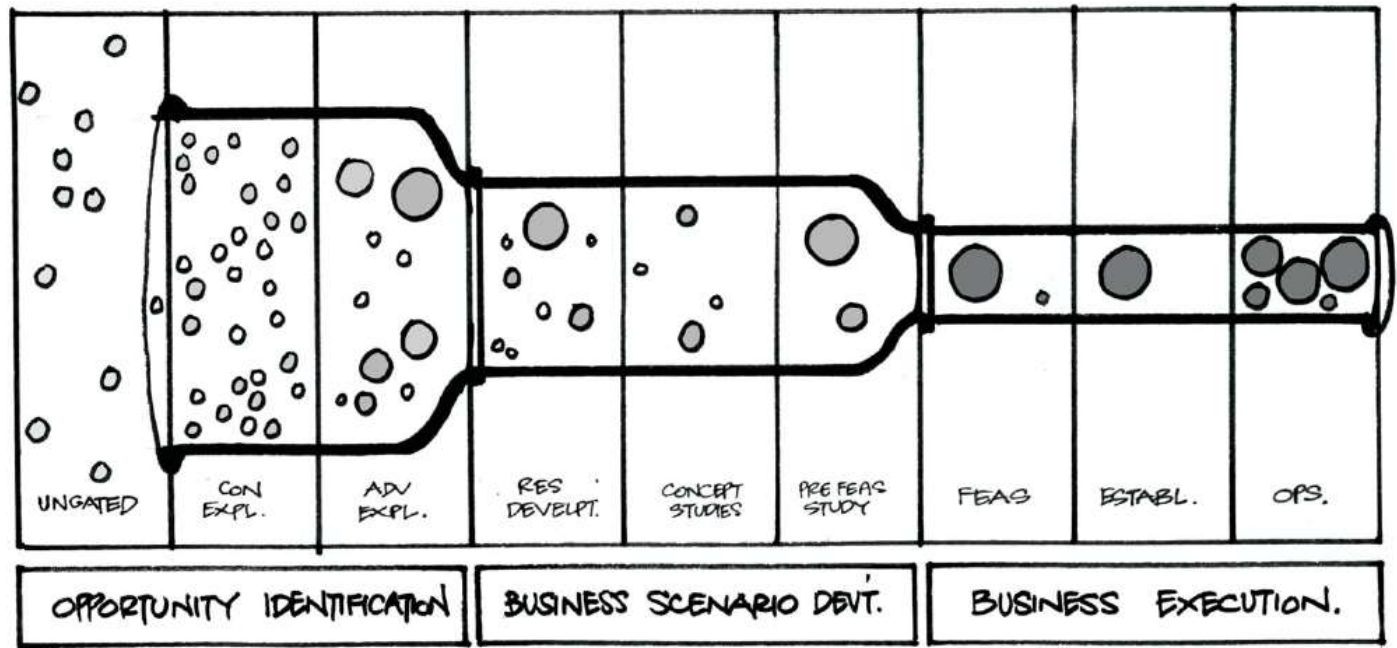
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Themes

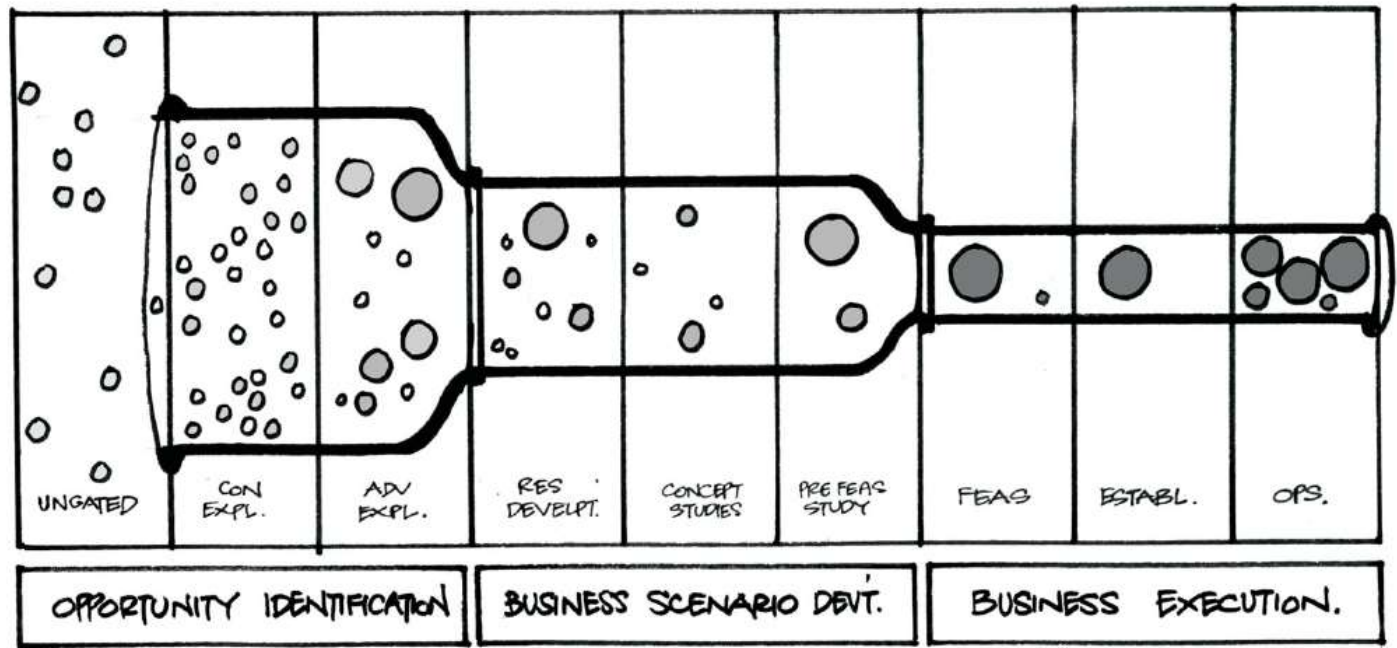
- Companies want the best for their projects / shareholders
- Financiers want to maximise return on their investment
- Regulators want willing investors and market confidence

Exploration project pipeline



(Source: Jock MacNeish, 2006, Pipeline Management.)

Falling in love with your frog



Can your frog be a prince?

- Better technical understanding might just make your frog a prince
- Take time to understand the risks
- To provide a project value range



The unknowns...

Things you don't know

- Dealt with by reporting standards (e.g. Table 1 JORC)

What you don't know you don't know

- Unexpected?
- Rarely unique, but maybe not recognised
- Need to have seen a lot of frogs



Successful exploration funding....

- Needs to support a large number of projects
- Not all are going to be successful
- Ensure funding is sufficient to properly test targets and understand the risks
- Recognises that discovery rates are low, but rewards are high

Exploration valuation challenges...

- Inherent variability across all stages, especially the early stages results in wide range of potential outcomes
- Market comparables are wide ranging, but so is exploration
- The market / company / shareholder don't like bad news, rework the valuation or move onto the next project...

Is this a success

DILBERT



BY SCOTT ADAMS



Project Volatility (Uncertainty)

78% had problems in achieving design production levels, 33% of projects had production problems for more than 3 years.

Actual cash flow was below expectations in 67% of cases, 28% never achieving a positive cash flow (half of these cases due to reduced commodity prices).

Operating costs in 43% of projects were above forecast, 29% by more than 10%.

Recovered grade was below forecast in 68% of projects, by more than 10% in 56% of cases.

Gold production targets were not met in 66% of projects, by more than 10% in 56% of projects.

Project Volatility



is in achieving design production levels, had production problems for more than 3

was below expectations in 67% of cases, giving a positive cash flow, half of the expected commodity prices.

in 43% of projects

**NATIONAL INSTRUMENT 43-101
STANDARDS OF DISCLOSURE FOR MINERAL PROJECTS**

... projects, by

... were not met in 66% of projects, by ... in 56% of projects.

Project Volatility



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Technical Studies

Reporting Standards and can be onerous.

Doing the “*right technical work right*” is not.

It is fundamental to the project and improves the confidence in the valuation.

Makes Reporting and Due Diligence (for finance) easier.



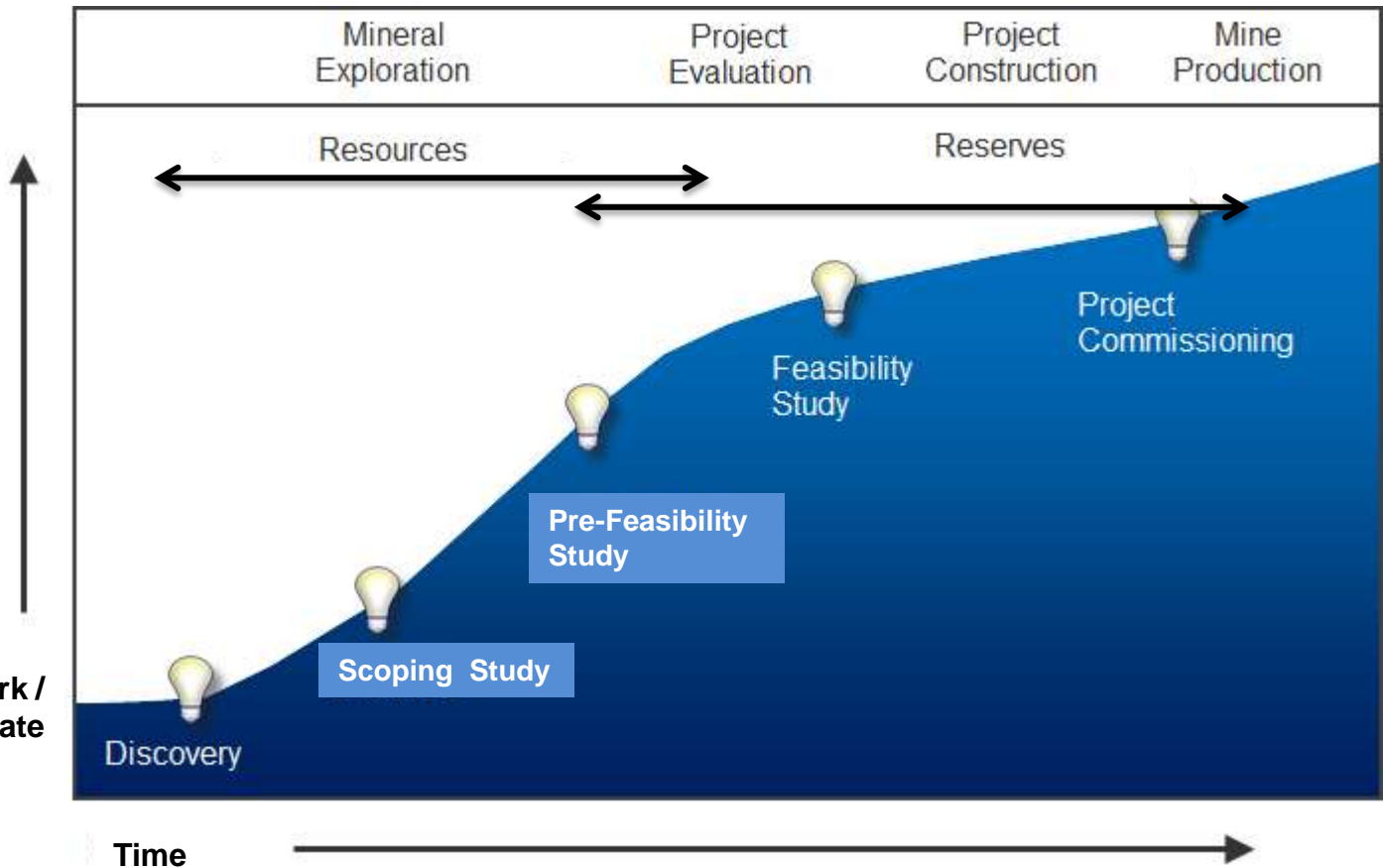
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The right time to buy

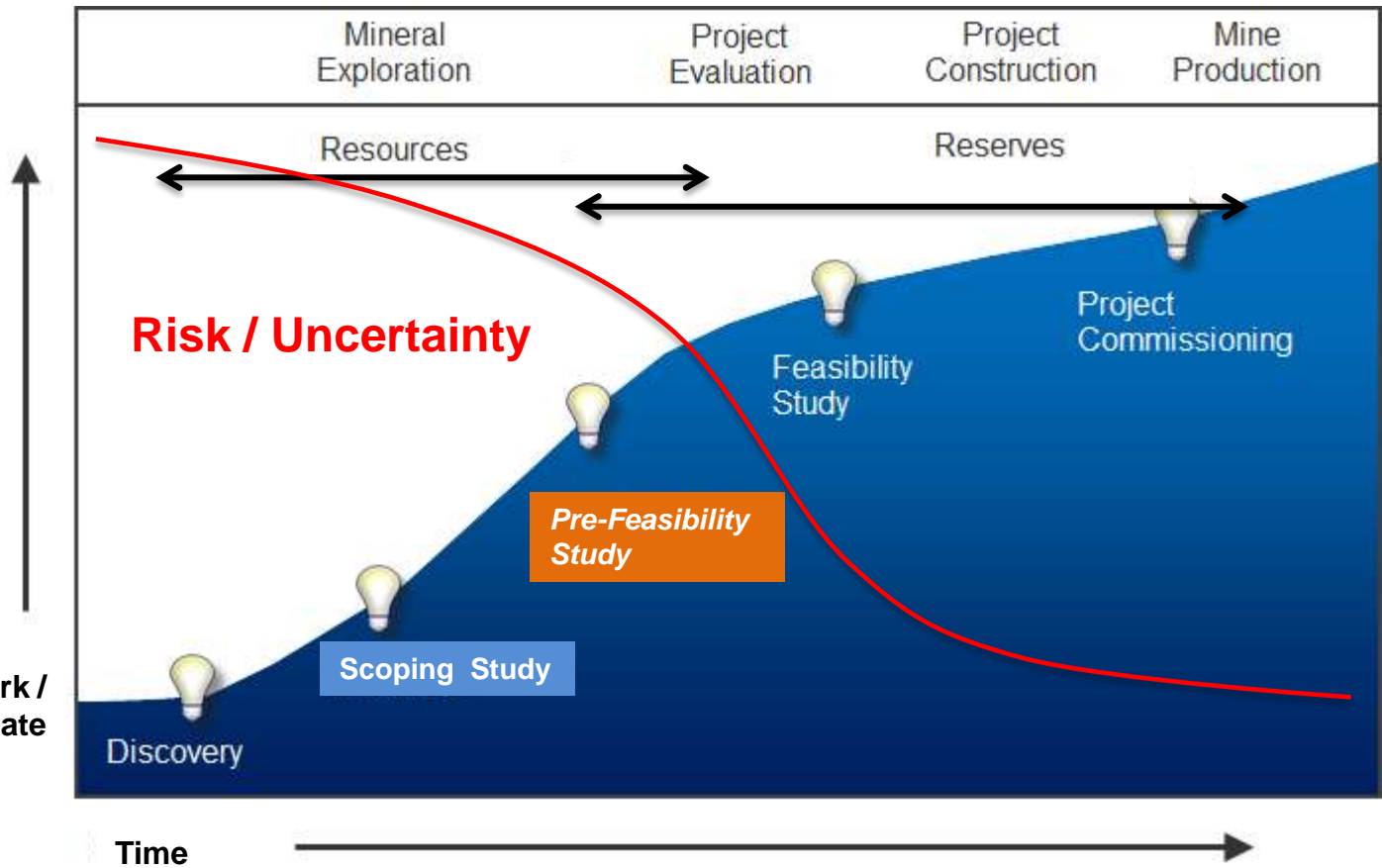
Value at each milestone to support the funding request to move to next milestone.

Value has a Range

Cost of work /
Confidence in estimate



Progressive de-risking



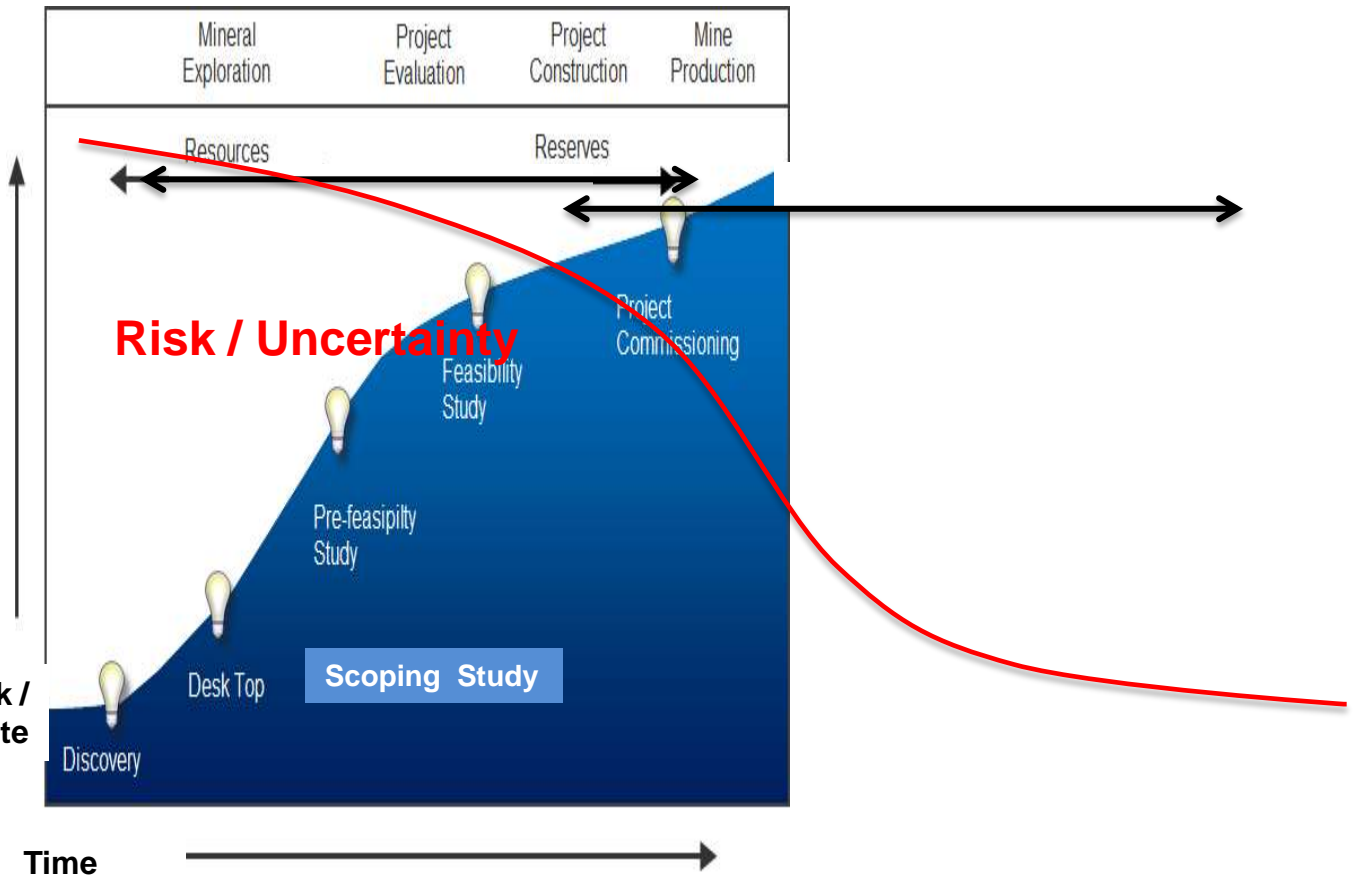
Cost of work /
Confidence in estimate

Time

The race to market

Be patient

Do the right work!



Cost of work /
Confidence in estimate

Understanding the project (be ready for Due Diligence)

Follow a process

Ask right questions

Minimise uncertainty

Techno-Economic model - NPV



Final Thoughts

Accept have to kiss frogs.

Understand the uncertainty valuation

Think about what you need to support funding request.

Reducing uncertainty takes time follow a process
Investor, Project Owner, Technical team.

Don't be afraid of the answers
Be prepared to reject



A Poem to Remember

Some mines make me happy,
Some mines make me blue;
But the one that gave me the most joy.
Was the one I sold to you.

Or should it read ...

“Was the one I bought from you.”

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