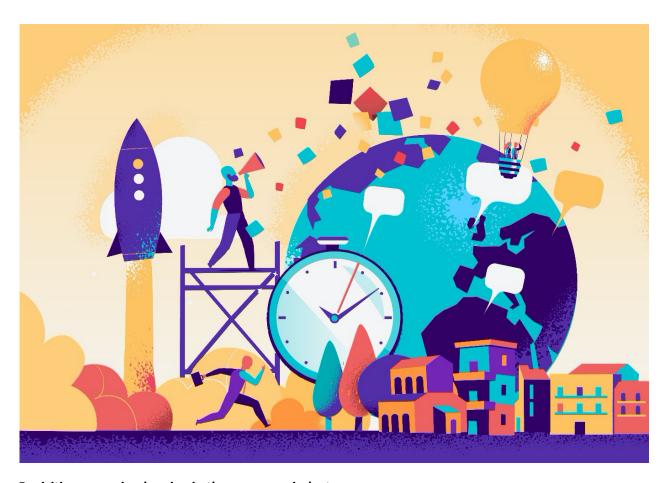
SLATE

Re-visiting Scenario Planning in the Resources Industry

Graeme Stanway – Director, Slate Advisory



Revisiting scenario planning in the resources industry

The 1990s and early 2000s were a comparatively stable time for mining investment decision makers. The volatility of the Japanese driven demand growth had largely settled, and planners consistently assumed a 1-2% annual reduction in prices and relatively incremental global demand growth. This predictability changed abruptly with the emergence of Chinese driven demand in the mid 2000s. Not surprisingly, we saw a resurgence of interest in scenario planning at this time to cope with the fracturing of status quo outlooks.

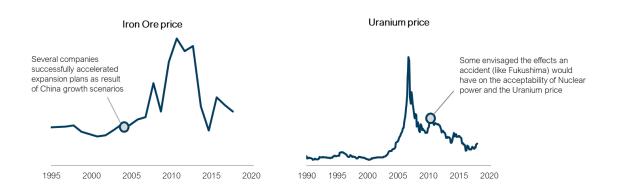


Figure 1: The strategic potential of Scenario Planning in the early 2000s

Fast-forward to 2019, and we have noticed that some companies who invested in scenario planning programs ten years earlier have pulled back from the complex exercises they had adopted previously. They have become dissatisfied because the extensive effort to engage their businesses in potential futures was not translating into a discernible impact on investment decision making and increased returns. The question could rightfully be asked does the problem lie in the effectiveness of the scenario planning, or in the decision-making processes, or in how the two are connected, or all of the above?

Now is not the time to give up on the challenge of applying thoughtful scenario planning to long term decision making; if anything it is the time to double down on the application of this important strategic tool. Uncertainty looking forward is just as high as prior to the early 1970s oil crisis, or just prior to the rapid growth of Chinese driven demand. For instance, China has likely reached "peak" crude steel production at a level many multiples higher than other economies, and the potential future pathways are wide ranging and their implications are large.

This is amplified by the fact that we are at an inflection point with energy supply sources given the rampup in renewable technologies, and that the track record of understanding and predicting energy futures in the past has been variable to say the least.

Some things change, some things stay the same

- When designing a businesses approach to longer term planning and decision-making, it is important to recognise that some inalienable truths remain, and some things will change. The challenge is to recognise which is which.
- In terms of what we believe is inevitable, and where history is a good guide, we would suggest the following:
- In capital intensive industries such as resources, returns are heavily shaped by the external trends and "timing the cycle". Understanding and acting on potential futures is therefore critical.
- The longer-term environment remains uncertain. Technical forecasting beyond 6 -12 months becomes a random walk, so accurate future planning necessitates the utilisation of scenarios.
- Long-term decision-making is fraught with human bias, for example: adapting forecasts to already committed positions; the inherent desire for unattainable certainty; extrapolation of the present, and many more.
- Incentives drive behaviour, but as we have seen (Figure 2) executive incentives across industry are very often mismatched with the perspective required for effective long-term decision making. This is a constant battle "short term pay-off versus long term value".

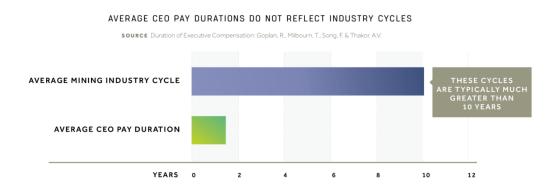


Figure 2: Industry cycles and executive remuneration (Source: www.stateofplay.org)

Despite these "truisms" many things have changed significantly over the last decade warranting a rethink regarding our approach to long term planning. These include:

- The capacity of technology to support the development and evaluation of future scenarios through simulation given advances in algorithms, data access and sheer computing power.
- Significant structural change in markets that now feature shifts in transparency, value chain integration, regulation, trading activity, and new financial instruments. Assumptions that underpinned past industry models may no longer hold.
- Business models have also changed across industries with a rise in the impact of start-ups, growth in services models (such as "servitisation"), and growth in low capital, data-based business models. How the industry ecosystem responds will be different to the past.

- The potential emergence of step changes in exploration and extraction technologies will enable more rapid and lower capital deployment in future through precision extraction, analytics, and automation.

Dealing with future uncertainty in long term decision making

The first condition for success is to recognise that the resources industry itself needs take leadership in developing techniques for long term planning. Most other industries which occupy the bulk of management literature simply do not face the same combination of time frame, capital risk, stakeholder complexity and uncertainty.

The second condition for success is to recognise the quantum of value that is at stake, and to appropriately invest in development of capability. It is perhaps not coincidental that the most advanced thinking and practice we have seen in the application of new techniques to long term planning and decision making is not in the mining of energy houses themselves, but in the investment fund industry where the long term measure of success is categorical.

With these conditions in mind, we would advocate a few simple principles in developing and implementing approaches to future scenario planning and long-term decision-making:

- 1. Be vigilant in testing for biases given they are inevitable, and that these long-term decisions have very high value consequences.
- 2. Recognise that the use of scenarios is a necessity and not an option, despite the ever-present push for certainty and deterministic responses.
- 3. Recognise that scenarios will have different probabilities, and that excess returns are not made by continually hedging in respect of future perspectives.
- 4. Get used to gaming and simulating industry responses. Strategy is ultimately "a contact sport" with actions precipitating some form of reaction.
- 5. Be biased towards action in taking options on future scenarios developed. Well-crafted scenarios are of no use if there are no consequential decisions.
- 6. Prioritise scenario planning and decision support as an important ongoing capability. It requires practice, learning, and development. It is not a one person, once a year job.

Finally, it is worth making the point that when dealing with the future and long-term decisions, the quality of human intuition and judgement remains vitally important. Therefore, the use of technology to augment human judgement, and the application of teams must also be key areas for consideration.