BIAS

#7 Motivational

Motivation is defined as a desire or willingness to do something in a particular way. That seems to be a good thing. However, when it becomes a bias that can lead to some disastrous consequences.

***MOTIVATIONAL BIAS, WHAT IS IT?***

*Motivational* bias is a tendency to take judgments or decisions based upon a desire for a particular outcome. This is linked to what is known as the *outcome* bias, which is the tendency to evaluate decisions based on the potential outcome rather than the quality of the decision at the time it was made. Unlike a cognitive bias, the *motivational* bias is generally a conscious action often motivated by one's own self-interest or a desire to align with a real or perceived expectation.

Whilst the concept of being motivated is considered a positive trait, as a bias it can negatively affect estimates, forecasts, judgments, and behaviours, potentially leading to bad decisions. The literature is littered with examples of disastrous outcomes for the public; for example, the companies motivated to lend sub-prime mortgages for revenue gain in 2008 contributed to a worldwide financial crisis; or Volkswagen, who to avoid paying fines, installed software that gave deceptively low results in emissions tests.

Examples of poor behaviours in the hydrocarbon industry include overstating prospect size or production forecasts, underestimating the cost and time for project completion, downplaying or ignoring uncertainty and risk to make their project appear more viable, or managers telling their staff to ensure the prospect resource potential meet a commercial threshold. Whilst all these examples are extreme, more subtle motivations, even if unintended, can influence individuals and lead to poor decisions. Many motivation drivers are unwritten and could be what the individual perceives is wanted by management.

When I teach my Mitigating Bias course, the *motivational* bias topic often engenders a great deal of debate and frustration amongst the students. Here are just a few of the examples they have shared with me.

- They'll get the message: "I would never drill a well that had a Chance of Success less than 20%"
- Or the more subtle: "I want you to do your best technical work, but we really do need this project to go forward"
- And perhaps the least subtle of all: "Change your numbers"!

***INFLUENCE IN HYDROCARBON INDUSTRY***

Let's be serious. None of us want to follow the rainbow looking for a pot of gold and find nothing! We all hope to find an exciting play or work up a prospect to a drillable status. It is human nature that professionals champion their projects and want to see them progress from exploration to production.

There really is not a whole lot of recognition in 'killing' a prospect! And we have management who consciously or unconsciously incentivizes us to deliver successful outcomes. How many times have

you been rewarded for a negative recommendation, such as relinquishing a license? Actually, such a recommendation can be quite valuable for a company, avoiding further poor investments, including drilling a dry well.

One area that sets our industry apart from many others is the long lead time required from the inception of the technical evaluation, the development of the recommendation, and then ultimately the actual outcome. This can lead to poor behaviours as teams want to be optimistic and progress their projects, and thus may overpromote their opportunity. Given the time lag, these poor decision quality behaviours may often not be captured; and the recommendations and evaluations may possibly even be rewarded through compensation and/or promotion!

Teams are often incentivized to 'sell' their project, and their judgments and decisions can be further accentuated by cognitive biases (e.g., *anchoring*, *confirmation*, *overconfidence*, etc.) that help justify a recommendation.

There can also be unintended consequences relating to a seemingly good motivation. For example, let's say the Head of Exploration wants to increase their prospect inventory. To incentivize staff, they introduce a performance metric for each team to deliver by year-end three prospects to the inventory, each with success case volumes exceeding a specified amount, and they will be rewarded accordingly. What will the evaluation teams generate by the end of the year? Three prospects per team with the specified volume. Will all the prospects have any realistic chance of reaching or exceeding that requested volume? Doubtful! Is that really what the Head of Exploration wanted delivered? No!

***IT'S MORE OF A MANAGEMENT RESPONSIBILITY***

Perhaps the single most important issue with *motivational* bias is that it is often exacerbated by management goal setting. Individuals can be aware of this bias and try to avoid, but any significant mitigations must come from management design of goals and targets. Ultimately this affects companies' performance. I like to say that the *motivational* bias is more a 'top-down' one (i.e., external from yourself) where cognitive biases are more a 'bottom-up' (i.e., internal to yourself).

Hence, management must design reward and incentive systems that encourage not just achieving the predicted outcomes, but also instilling the right behaviours and best practice decision-making processes to achieve those outcomes. Prior to implementation they should also consider if the rewards may negatively influence people's behaviours, leading to unintended consequences.

Focusing on the process rather than the outcome seems more sensible when there is more risk involved (e.g., exploration) in that the outcome could be related to randomness, luck, or external factors. However, even in low-risk industries, focusing only on the outcome could be problematic. For example, making 'widgets' is pretty straight-forward, and so management decides to reward employees that make more 'widgets' than average. Good motivation? Perhaps; but, perhaps not. Maybe by rushing to make a greater number of 'widgets', the quality goes down. Or, maybe an employee concentrates on not making more 'widgets', but rather on coming up with a more efficient process for making 'widgets'. Rewarding the innovation would be a far better approach than the outcome of simply making more 'widgets'.

***MANAGERS PERSPECTIVE***

Managers have seen throughout their career the impact of *motivational* bias. I interviewed a senior manager (VP Exploration) to get their unique perspective for this blog He clearly recognises that this can be endemic in an organization leading to poor decisions and loss of value. A challenge in the organization is that activity drives everything, more that it should. Hence, at all levels, people will be

incentivized to deliver opportunities, which can drive poor behaviours that can lead to poor decisions. This conundrum needs to be acknowledged.

He presented an example of motivational bias at his level. Exploration was looking at the acquisition of a particular license in a new country. They came up with a value of X (NPV, size, chance) and presented this to their Executive Committee (EC). Unfortunately, the value X was below the price wanted by the seller. The EC asked him to re-evaluate the opportunity and increase the exploration value to make it equivalent to the asking price as the company was keen to enter the country. He declined to do this, but rather suggested instead to add a strategic element (e.g., value of country entry) to the opportunity. The EC would not do this and wanted exploration to shoulder the risk. The VP Exploration stood his ground but noted how easy it would have been to "re-evaluate" the opportunity and increase its value.

He noted one problem for the decision-makers is that they are usually too far removed from the opportunity. The Regional offices are clever enough to put pressure (subtle or direct) on their staff to "inflate" the numbers and will come to the decision-makers with a polished presentation to promote their prospect. This is hard for the decision-makers as they are very much at the mercy of the optimistic frame. This is one reason he relied on an independent assurance team to provide credibility to the presentation.

He believes that within exploration the focus must move from the individual opportunity to the success of the exploration portfolio. Incentives and rewards, whilst acknowledging personal performance, should take a more holistic view. Unfortunately, it is easy to say as we are all human!

***UNTIL NEXT TIME***

On my next blog article, I will interview Creties Jenkins, co-creator of the Mitigating Bias course.

Stay safe and healthy.

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