UNDERSTAND AND OVERCOME BIAS

#1 Introduction

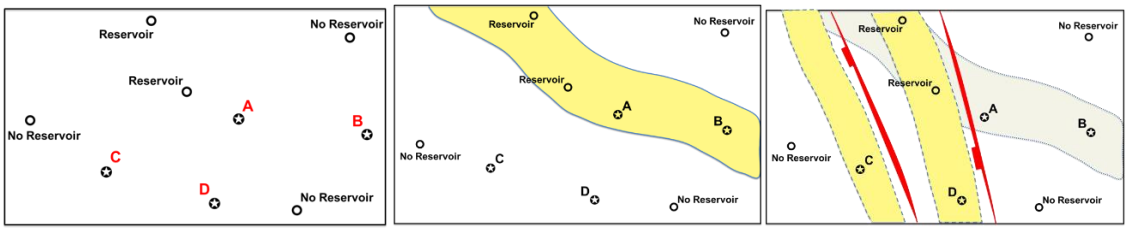
***WELCOME!***

Hello and welcome to my blog on the topic of Bias!

***WHAT IT IS (AND ISN'T) …***

Upfront, we will not be talking about some important biases that have received a lot of media attention lately, such as *implicit bias* (an unconsciously-held set of associations about a social group, commonly known as a 'stereotype'). Rather, as a geoscientist, I will focus on the biases that affect our decisions and interpretations in the petroleum exploration and production business.

Let's take a look at an example of how these biases could manifest themselves in our industry. Say you have some wells labelled 'Reservoir' and 'No Reservoir' as noted on the map below on left, and you have developed a model of a NW-SE trending channel as shown on the map in the middle. You can purchase two wells (sorry, your boss has limited funds!) to further your interpretation - which two wells would you purchase? Your inclination would perhaps be to purchase wells A and B. But what if the correct model was the map on the right? By purchasing wells A and B you would be none the wiser. This is an example of *confirmation bias*, which we will explore in upcoming posts.




What can we do when we recognise this bias?

***… AND WHY IT IS IMPORTANT***

Why is bias so important to understand? Let's start by looking at my career journey and what I have discovered.

I began my career 40 years ago in the USA, working onshore oil projects as an exploration geophysicist. I have since worked on projects on every continent (except Antarctica). As a team leader, exploration manager, assurance manager, and finally chief geophysicist, I have been able to see many different projects and evaluations done by others.

My years as Head of Subsurface Assurance, were key in deepening my interest and understanding of biases. With my colleagues, we reviewed and assured thousands of projects. Our goal was to provide objective, independent and consistent guidance to teams and management about their assessment, recommendations and decisions. What we observed was that the teams were making *predictable*, *consistent* and *repeatable* errors in their interpretations and decisions.

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Now, working as a consultant with Rose & Associates, I am observing similar patterns within other companies. In other words, cognitive bias is endemic within the industry, and unfortunately these biases can lead to poor predictions and decisions, and in the end, loss of value.

***SO WHY IS IT RELEVANT?***

Ok, so our success rate as an industry is not where we would like it to be. Could it be poor technical expertise? Poor decision-making processes? Lack of training? I suppose for some companies and individuals this could be true, but for the vast majority of us, this is not the case. So, what else could it be? Asking this question led me to research cognitive biases and learn about their impacts on us.

My experience led me to develop, along with my colleague Creties Jenkins, a training course entitled **Mitigating Bias, Blindness and Illusion in E&P Decision Making**. We both thought it was important topic to help people mitigate these biases, but we were not sure if the industry would welcome such a course. Well, we must have hit a nerve! Over the past four years, we have delivered this course nearly 100 times! Clearly, people in the industry see bias as an important issue that can negatively impact their work and are looking for strategies to mitigate them.

In my blog, I will share interesting and relevant topics on bias and how they relate to our industry. I will discuss several of the important biases, but I also hope to delve deeper into the topic of bias. Some of the material will come from the course, but I will also explore many other areas related to bias. My hope is that this will be an engaging and collaborative forum for us to express our ideas; and I welcome comments, questions and most importantly, examples where you have observed bias in your work and perhaps tried to mitigate against it. My intention for this blog will be to post every few weeks.

Until the next time, stay safe and healthy.

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