A Deliberate Search for Disruptive Oil and Gas Discoveries: Clues along the Way

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Abstract

Disruptive discoveries are defined here as the new oil and gas discoveries of a material scale that reset the existing oil and gas discovery basin creaming curves, or represent new country entry discoveries at a giant scale. Are these events predictable? If so, what are the key observations and key datasets that could point to these events.

Clearly these disruptive discoveries are what oil companies search for but given the vast datasets available across the upstream sector and the ongoing day-to-day business it can be hard to step back and examine subsurface assumptions, and in some cases, re-examine assumptions that allow clarity in searching for disruptive new discoveries.

This paper looks at several of the recent disruptive discoveries and discusses the clues in the key datasets and key observations that led to their emergence. It then describes a set of geological assumptions that should be challenged and potentially adjusted in the future search for such opportunities.