Exploring Giants : some Thoughts on Success Drivers

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By virtue of the lognormal distribution of field reserves in a basin, the number of large fields found and to be found is lower than the number of small-to-medium size fields. Finding and developing large fields is critical to a company's upstream growth, and particularly so for frontier exploration like in deepwater, high pressure-high temperature or fold-belt conditions, where size matters much economically. Some thoughts about giant fields and related exploration are illustrated with examples from West and North Africa, South America and South-East Asia.

Firstly a much better predictivity of prospect expected reserves is made possible through a combination of advanced technology and practice of risk analysis. A giant discovery does not come as a surprise as much as it happened in the past.

Secondly, size is not an absolute criteria. A "non-giant" (as defined by the conventional classification), can be very profitable if developed as a satellite of a "true" giant. Thirdly, beyond the rationality of risk analysis, based on established models usually considered for a given area, some room must be left for an optimized vision, which means thinking that maybe things will turn out better than expected, for instance with deeper hydrocarbon-bearing reservoirs, or a new trapping mechanism.

A fourth remark is that one never ceases exploring a field (giant or not) well after its discovery and appraisal. Reservoir characterization is a long process, for instance when considering field re-engineering at a stage of maturity, to make sure that the related program fits well with fluid and reservoir conditions.

Last but not least, geological thinking respectful of the laws of nature and the reality of rock analogs, and a spirit of innovation are and will be needed to continue exploringsuccessfully.