

## Exploration Interview: Kurt Strack, Founder of KMS Technologies

*The founder of KMS Technologies is continuing to push the envelope of electromagnetic (EM) technology. E&P asked Dr. Strack to answer a few questions about his company and the EM industry.*

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**KMS Technologies is celebrating its 10th anniversary this year. Why did you found the company? What have you accomplished during the last decade?**

We founded the company on request from several major oil companies who wanted to use us to carry out external R&D. Of course, the real implementation never led us to become an R&D arm for these companies, but we started with specific oil company-funded projects. Our first projects were in 1999 for the DeepLook consortium (BP, Chevron, Texaco, Conoco, and Shell) and other oil and major service companies. The technology covered a feasibility study for a geosteering tool that can look ahead and around the drill bit.



Strack, Founder of KMS Technologies

Kurt

We also decided early on that we would only focus on complete technology cycles that we would spawn from the very beginning by deriving concepts and idea, patents, proof of concept, prototype, and finally commercial versions.

We have developed several technologies for borehole, mud logging, and surface methods. Our single well geosteering technology has been further de-risked, and we have commercialized mud logging NMR technology for drill cuttings (now licensed to NER). We developed marine time-domain controlled-source EM (CSEM) and carried out a large commercial survey with a major oil company and one of our parent companies.

**News from the industry is hard to read. Some companies are cutting back while others are maintaining or even increasing their exploration budgets. How has this affected the EM market short-term? How will it be affected in the longer term?**

Short-term, the EM market will have to prove its merits since all non-core activities are under review. This is due to the present financial crisis on one side and on the other side due to the over-expectations from the industry that the technology will provide the same resolution from seismic, which EM will never have.

Long-term, EM will move out of the present niche to a more prominent place as the education of EM improves in academia and the industry. Marine EM is here to stay as it has found hydrocarbons. Other EM techniques closer to the bottom line and value will emerge and take over.

EM will also move up in the decision-making cycle.

**What are some of the key technical challenges EM faces going forward? What is being done to address those challenges?**

The biggest challenge is the education of the industry. We are addressing this by rolling out an industry education program. Most likely other companies will follow.

EM needs to be carried to the early phases of production monitoring where the value is high and the technology requirements manageable. Permanent installations will become commonplace.

Further, the unit cost of hardware needs to be reduced, and one order of magnitude more measurements need to be acquired.