

June 4, 2013 IADC Future Technology MOM



Introductions

Brief review of committee workshops, history and goals.

Main topic discussed was presentation of BOP technology workshop findings and paper outline established below.

IADC Advanced Rig Technology Presentation/Paper Topic and Outline

Title:

Culture and change in upstream oil & gas business in acceptance of new technology.

Introduction:

The upstream oil & gas sector is very conservative in adapting new technology; which is consistent with equivalent industries using heavy machinery. No one wants version 1.0 and almost all are happy to watch while others take risks and debug the products and systems. For example, technology such as horizontal wells with multiple hydraulic fracture stimulations, driving the unconventional gas shale developments, took close to 10 years before becoming widely accepted.

The Future Technology subcommittee of the IADC Advanced Rig Technology committee has organized workshops on a range of topics, and the influence of culture on technology adaption is very striking from the reviews of such workshops. Does technology change the culture or does the culture adapt the technology? Sister workshops on the next generation BOP's were organized: one was held in Stavanger, Norway the other in Houston, Texas. These workshops highlighted strong cultural influences. The paper being submitted will address the range of viewpoints on this topic, from the operator's perspective through the drilling contractor to the OEMs and service segments. As the upstream sector moves rapidly to using rigs with high degrees of mechanization and automation, how will the inherent conservative culture change or adapt such technologies?

In the post Macondo world, the ability to operate is tightly linked to public acceptance. Failure or slowness to adopt new technology which improves safety and reduces environmental impact, will suffer disdain in the public domain. How can culture and technology be used to promote the faster uptake of new technology?

BOP Workshop Summaries:

- Demographics
- Presenters and key points

BOP Technology Industry Dynamics:

- Operators
 - o Incentives
 - o Perceived market pain

- Adoption Barriers
- Contractors
 - Incentives
 - Perceived market pain
 - Adoption Barriers
- OEM Equipment Providers
 - Incentives
 - Perceived market pain
 - Adoption Barriers
- Technology Providers
 - Incentives
 - Perceived market pain
 - Adoption Barriers

Industry Cultural Summary:

- North Sea Vs GOM
- Heavy Industry Technology adoption challenges
- Micro & Macro look at drilling culture
- Industry Partnership & JIPs

Summary & Conclusion:

- Summarize the above and distill key points

Next meeting scheduled for July 2nd @ 9:30am

Attendance:

Name		Company Name
Michael	Weston	APITEQ
Rolf	Gullaksen	Cameron
Randy	Mutch	Ensign Energy Services Inc
Mike	Killalea	IADC
Rhett	Winter	IADC
Thomas	Geehan	M-I Swaco
Brad	Applewhite	National Oilwell Varco
Stan	Stephen	Odfjell Drilling AS
Dustin	Torkay	Seadrill