Technology Development in a Major Service Company Today: Processes, Issues, and Future Challenges

The rapidly changing landscape of technology and operations in the oil industry has caused several major service companies to significantly alter the way new products and services are developed. This paper analyzes several of the key technical and organizational challenges affecting technology development in the oil and gas services sector today, and points out a number of issues likely to confront the industry tomorrow. The analysis includes a discussion of Technology organization / management and product development and commercialization, and how these processes are adapting to meet these challenges. A new coiled tubing drilling technique illustrates the scope and effectiveness of these adaptations.

The paper will also highlight a number of the most important new technologies that will be needed as the industry moves toward instrumented deepwater oilfields and more demanding requirements for real-time information. Examples of reservoir monitoring and well completion R&D projects designed to address some of these new technology demands will be presented.