Real-time facility optimizes scarce resources

Digital hub designed to improve workflow processes

HALLIBURTON DOESN’T just want to sell its technology. It wants to sell a whole new way to work. That’s why its Real Time Decision Center (RTDC) will come with Halliburton experts to help “people to work more efficiently and to make better-informed decisions,” said Peter Bernard of Halliburton’s Digital and Consulting Solutions (DCS) Division.

The division recently launched the industry’s first completely integrated and fully digital RTDC, which aims to enable “a new level of collaboration by breaking down the silos between traditional visualization and operation centers and brings all the hardware, software and people into one place for effective decision-making.”

The custom-designed facility makes for a collaborative environment for a company’s entire asset team - exploration, drilling, production, asset management and finance.

It is created for each company’s specific workflow needs, which is why Halliburton calls the RTDC a “process improvement project, not a technology transaction. The focus is on what the customer is trying to accomplish,” the company said.

In the industry’s trend toward the digitization of the oilfield, people will be the roadblock to optimized production unless they become part of the digital team, according to Halliburton. And in an industry short on trained personnel, companies need to learn to leverage their pool of talent, speed up the knowledge transfer and help them make better and quicker decisions.

4 MAIN COMPONENTS

In development for 7 months at Halliburton, the RTDC consists of 4 main components:

• Collaboration room — A cross-functional working space where all the members of the asset team, including geologists, geophysicists, drilling engineers and completion engineers, can share data and collaborate.

• Real-time operations room — Where experts in all the well-construction specialties can leverage their knowledge across many projects by monitoring and controlling remote or production facilities in real time.

• Decision-center — A large-scale presentation room where the results of the collaborative process can be presented to decision-makers and reviewed in an immersive environment. The room has portable walls that allow for adaptability to suit different projects. It also features the Sony 4K projector, a state-of-the-art technology originally developed for the cinema industry but now adapted for use to optimize drilling and exploration.

• Digital office — A playground where the RTDC professionals can test new and emerging technologies. Halliburton takes a 5-phase approach to creating a custom RTDC for each company:

  • Needs assessment to define the scope, functional requirements and budgets.
  • Baseline plans for the facility, technology and operations at a high level for executive review and approval.
  • Detailed plans for the facility, including detailed construction drawings for architectural and engineering needs, as well as specifications for new technology and installation.
  • Construction, integration and implementation of the facility, including procurement, construction, installation, integration and startup of all aspects of the center.
  • Operations management by Halliburton personnel on-site to run the center, Halliburton asset performance consultants to work with the customer’s teams to maximize their use of the software, and by hardware representatives to facilitate use of the equipment and to provide updates.

Depending on the size of the project, cost can vary between $400,000 to $2 million, Halliburton said. The company also estimates that the RTDC can help increase production by 20% in 8 months. Additionally, early adopters of real-time monitoring place cost savings in the 35% to 50% range.

It may take up to 2 years before success can truly be measured, the company said, depending on the project size. But Halliburton is inviting companies to take the RTDC for a test-drive now, with access to software and application-hosting environment. For more information, visit Halliburton’s Web site at www.halliburton.com.