

Rapid Acceleration of Well Planning Timelines in Austria

How OMV E&P improved its well planning process using Schlumberger technology

OMV E&P shortened the concept selection process from weeks to days and reduced the time required to generate a drilling program by more than 50%.

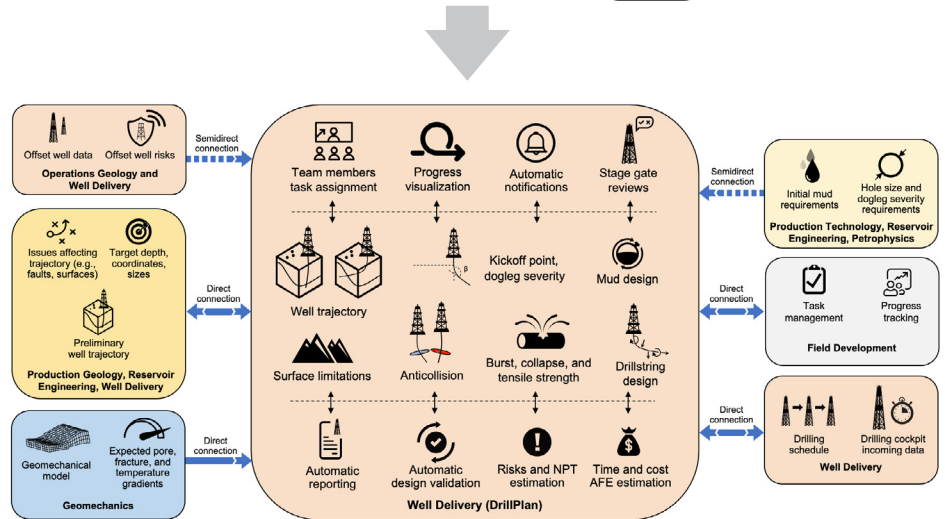
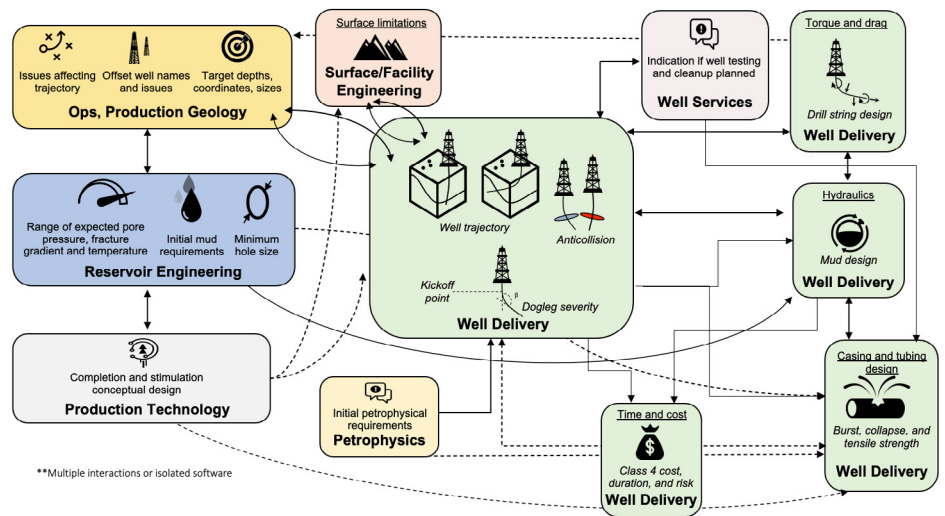
A focus on innovation and research

OMV E&P, headquartered in Vienna, Austria, is one of the most efficient operators of mature fields in the world, with the highest recovery rates. This is achieved through a consistent drive for innovation and a focus on research and development that continues to pay dividends. As part of this, the company aimed to improve the planning process for its onshore development wells, many of which are located in challenging drilling environments.

Until recently, OMV E&P used traditional software that relegated its team to working in silos with data stored in multiple disconnected offset well databases, a situation that made the well planning process tedious and inefficient. Well planners had to access history data and lessons learned in many different formats, including PDF, Microsoft® Excel® and Word®. With a system like this, relevant information was often hard to access.

An optimized and simplified well planning solution

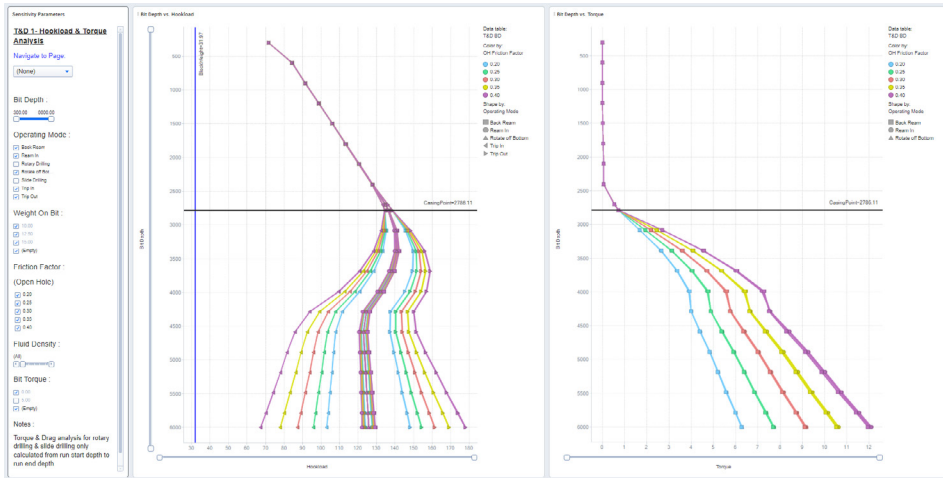
To enable a digital transformation, OMV E&P chose Schlumberger as a strategic partner due to the strength of its technology offerings. To update the OMV E&P well planning process, Schlumberger deployed the DrillPlan* coherent well construction planning solution. The DrillPlan solution integrates the results from company drilling projects into a single, common database and improves the efficiency of project teams by enabling all disciplines—from operations, geology, and petrophysics to completions—to work on the same platform, with everyone having the newest data and insights available.



The above diagrams show the OMV E&P well planning process, as it was done before (top) and after (bottom) the company started using the DrillPlan solution. The DrillPlan solution produced more efficient workflows and streamlined all aspects of the planning process.

Using the DrillPlan solution, OMV's well planning teams could access and visualize offset well data more easily, without having to research past reports. The automation of repetitive tasks and validation workflows enables higher quality drilling programs to be produced more rapidly and ensures that each plan is fully coherent. Because the DrillPlan solution includes circular workflows, plans are improved as new data is added so that future programs learn from the experience of all well drilling programs planned before.

Case study: Drilling



Sensitivity analysis visualization—hookload and torque analysis.

Risk analysis and lessons learned for exemplary results

OMV E&P immediately set to work using the DrillPlan solution for its onshore development wells in Austria. The DrillPlan solution saved time by eliminating repetitive tasks like building offset well databases or writing programs. This helped engineers identify and analyze risks more quickly, incorporate lessons learned, and integrate these into their execution plans to maximize performance.

The concept selection process, which normally took 2 weeks to finish, was shortened to 2 days using the DrillPlan solution's powerful data-handling capabilities. The time taken to implement direct learning from offset wells was reduced by more than 15%. Whereas engineers once needed to enter planning data multiple times into different software interfaces, the data could now be input just once, automatically shared across the well project, and applied to different design components. This reduced the time previously spent going through documents and double-checking data by 25%.

The DrillPlan solution's automated reporting capabilities reduced the time required to generate a multiwell drilling program by more than 50%. Technologies that OMV E&P successfully implements in Austria are shared within the OMV Group, and, as a result, the solution is now being used by OMV Petrom to plan onshore wells for its Romanian assets. Throughout the OMV organization, well planners can now enjoy greater cost savings and greater agility in responding to new opportunities through leaner processes and major efficiency improvements.

With its commitment to being a digital frontrunner in the industry, OMV E&P recognizes that the DrillPlan solution—as one of the native applications hosted in the DELFI* cognitive E&P environment and a key part of OMV E&P's digitization program, DigitUP—is core to realizing that vision. The way that the DrillPlan solution interacts with other applications and datasets has changed OMV E&P's perspective toward well planning and engineering.

Technical details

For more information, read SPE-208143-MS.

“The DrillPlan solution and the DELFI environment are pivotal in helping us achieve our digital transformation. They are core in our move to automated workflows for delivering efficient and effective projects. In our case, the DrillPlan solution helped plan eight wells in the time it would normally take to plan one.”

John Watters
Head of Technology Services Development
OMV E&P

slb.com/DrillPlan

Schlumberger