



# AI-powered drilling scheduling software generates \$100 Million in Free Cash Flow

## Case Study

### A significant return on investment

---

A major US operator is using Actenum's DSO/Upstream software to optimize its drilling operations and has been able to generate **\$100 million in Free Cash Flow** in a single year by rapidly and easily simulating the impact of rig reductions, and presenting multiple operational options to management. Since the operator views the impact of schedule updates and changes in real time, they have **saved \$10 million** by examining multiple well sequence scenarios and choosing the best.

### The scheduling challenge

---

Prior to DSO/Upstream, the operator used MS-Excel spreadsheets to schedule their drilling programs. As operational complexity increased in the last few years their spreadsheet-based approach was hindering rather than supporting their efforts. It required a large amount of manual effort to keep up to date, didn't provide visibility into schedule Key Performance Indicators (KPIs), and made it very difficult to determine cycle times since it only provided a tabular view of wells and their associated operations. Drilling activities were being scheduled out of order instead of

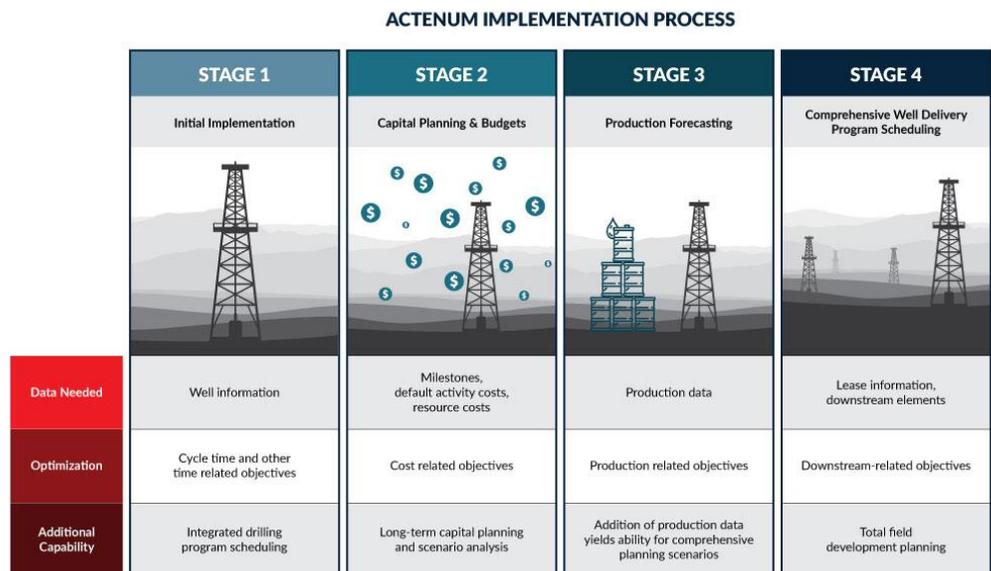
in the correct sequence, resulting in lost time and inefficient use of assets as well as personnel--negatively impacting productivity and year-end results.

## The operator's objectives

In addition to needing the ability to closely monitor KPIs as schedule changes occurred, gain better visibility into operations, and improve the scheduling process and agility, the hyper-competitive oil and gas environment was pushing the operator to be leaner and more efficient than ever. To address their needs, the operator turned to Actenum's DSO/Upstream, which manages the complexity of integrated scheduling with powerful decision support technology and advanced analytics that rapidly identify optimal schedules to meet business goals.

## From rapid implementation to impressive insights

Actenum delivered a fast, yet methodical implementation process, split into phases, to ensure the successful adoption of DSO/Upstream. Phase 1 incorporated workshops to educate users and stakeholders, Phase 2 covered product configuration and installation, and Phase 3 focused on training and mentoring. The customer was up and running quickly, and rapidly saw value from the Actenum software.



Using DSO/Upstream, the operator was able to automatically generate drilling program Integrated Activity Plans, optimized against business objectives and priorities, such as Free Cash Flow and Production targets. The software simplified the process of making schedule changes and enabled optimization on a variety of business goals, including production, cycle time reduction, and cash flow, while also satisfying all constraints. DSO/Upstream gave the schedulers the ability to create and evaluate multiple “What if?” schedule scenarios, which enabled them to know exactly how decisions about operational activities would impact their goals.

## Immediate impact on Free Cash Flow

---

As mentioned above, as a result of implementing Actenum DSO/Upstream to evaluate the impact of rig reduction and present options to leadership, the operator benefitted from **\$100 million in Free Cash Flow**. Several other positive results followed, including major time savings for the schedulers and decision-makers.

Most of the financial benefit results from DSO/Upstream’s automatic optimization and scenario evaluation capabilities. The software rapidly optimizes the entire drilling project activity sequence, according to objectives and constraints that the project team specifies. Each separate optimization run is saved as a scenario and compared to other scenarios, enabling the team to select the best one at any point.

## The way forward to additional benefits

---

DSO/Upstream continues to streamline scenario analysis for the operator’s planning team, enabling them to look at scenarios faster, to decide on the most appropriate execution schedule at any point. As well, DSO/Upstream is used in assessing future acquisitions and new business unit starts. Planners are now able, in a very short time, to determine in advance whether new business plans are executable and financially advantageous.

## More information

---

Actenum products are designed for Upstream scheduling, are completely configurable, and can model any type of workflow, activity, resource, and constraint. For more information and a live demonstration, contact [info@actenum.com](mailto:info@actenum.com).