Apply Sørco achieves 30% efficiency gain, thanks to enhanced technology adoption

Company Name - www.applysorco.no
Industry - Engineering Contractor

Goals
- Increase design efficiency
- Gain competitive advantage and win new contracts
- Attract next generation of engineers to adopt new technology

Challenges
- Time-consuming tasks
- Major clients demanding substantially lower costs
- Excessive administration work

Solution
- AVEVA E3D Design

Results
- Up to 30% efficiency gain
- Huge savings in man-hours
- More competitive and strategically placed to win new projects

“We invested at a good time because these efficiency savings were starting to be demanded by our clients. So, this positioned us strategically and it has already helped us to win some of the new contracts.”

- Mark Crombie,
  Discipline Authority 3D Admin at Apply Sørco
Apply Sørco Achieves 30% Efficiency Gain Thanks to Enhanced Technology Adoption

Stavanger, Norway – Apply Sørco is a leading international multi-discipline engineering company delivering services to the oil & gas industry, mainly on the Norwegian continental shelf. Headquartered in Stavanger, with offices in Bergen, Krakow and Hammerfest, Apply Sørco covers all project phases from concept development and studies to completion and commissioning, as well as operations, maintenance and modifications.

In the last few years Apply Sørco has secured large maintenance, modification and operations contracts with the oil & gas companies Equinor, Eni and Lundin. The company was established in 1979.

The offshore cost challenge

A sharp fall in oil prices forced the offshore oil & gas companies to substantially cut costs across the whole spectrum of their business activities. As a result, subcontractors are now under pressure to reduce their prices. For engineering and service companies like Apply Sørco this means that they have to spend fewer man-hours per task. In 2014, the executive management team of Apply Sørco saw the beginning of serious changes in the oil & gas industry and they were clear that these changes would reshape the industry.

Time-consuming tasks

Apply Sørco’s major clients on the Norwegian continental shelf mandate their subcontractors to deliver data and information using AVEVA software, and the deliverables vary from client to client. While companies such as Equinor, a big organisation, perform a lot of engineering and design work in-house, many smaller companies rely more on external providers, like Apply Sørco.

AVEVA PDMS has been the standard design software for the oil & gas industry in the North Sea for years. In addition to PDMS, Apply Sørco used software packages for drawing, laser scanning, and support. The integration of these was not optimal, as it required numerous mouse-clicks, and the engineers had to switch between different software packages.

Finding the right direction

Having a smaller organisation than many of their competitors, Apply Sørco felt that they could make the oil industry’s demand for lower costs work to their advantage. They tried to identify as quickly as possible where they could be more efficient, and one thing that appeared on the radar was software.
Because the company was already closely interacting with AVEVA, they decided to test AVEVA E3D Design on a small project, to identify efficiency savings. The results provided the basis for Apply Sørco to start the migration process to AVEVA E3D, and implement new technology.

**The E3D experience**

The efficiency savings were a driver for Apply Sørco to upgrade from PDMS to AVEVA E3D. But the transition was also cost-efficient, since the total licensing for the AVEVA E3D package is slightly lower than the sum of licences in the PDMS system.

The management decided to invest in AVEVA E3D in December 2014, and the company started implementing it in early 2015. Apply Sørco was the first company in Norway to run AVEVA E3D. The AVEVA E3D solution implemented at Apply Sørco consists of four modules: Design, Draw, Laser Scanning, and Supports.

**The benefits: Huge savings in man-hours**

Before starting the transition to new software, Apply Sørco measured how many man-hours they spent on each task in the engineering process. After having used AVEVA E3D for nearly two years the results have been remarkable.

**Design:** The engineers carry out modelling work, such as structure, piping and equipment, in this main module. Efficiency savings have been around 15% of project time spent for the same tasks compared to PDMS.

**Draw:** This module turned out to be much easier to use and to learn compared with its predecessor. It takes the simplicity of a 2D drawing package but still keeps the intelligent link to the design model. Efficiency savings have been around 30%.

**Laser scan and data:** Before designing new equipment on an existing platform, the site is scanned with a laser. This module ensures that the laser scan data is fully integrated with the design and draw modules. Efficiency savings have been around 15%.

**Supports:** This multi-discipline support module is used to design all the pipe supports for the project. The module has been completely redesigned, and is now included in the AVEVA E3D licence. Apply Sørco started using it in January 2017, but can already see efficiency savings around 15% and rising.

“From our calculations it was clear that we were onto something; that a change of software was the right direction for the company, even if it meant investment, training and new procedures.”

- Mark Crombie, Discipline Authority 3D Admin at Apply Sørco
Seamless implementation

Crombie pointed out that AVEVA E3D is much easier to use than PDMS. The engineers need fewer mouse-clicks for the same tasks. Being more intuitive than their predecessors, the modules are much simpler to learn and implement. In addition, the modern look and feel will be more attractive to young engineers coming into the company.

Apply Sørco did not have a huge training budget, so a lot of their engineers learned by doing. In the first year they divided the work so that some engineers worked on PDMS while others worked on AVEVA E3D. In this way the company both met time targets and introduced the new system.

Crombie did not hide the fact that their engineers’ attitudes to new software differed widely. Some embraced the new technology right away, but others stuck to the system they knew, especially when they had strict deadlines. However, according to Mr. Crombie, the overall feedback from the engineers has been overwhelmingly positive.

“They were amazed at how easy it was to use. Now everyone works on AVEVA E3D, and we use the software on all of our projects.”

- Mark Crombie,
  Discipline Authority 3D Admin at Apply Sørco