Leading Oil Operator Utilizes Smart Cloud for Megaproject

Project Summary

This project is located on one of the world’s largest and richest oil fields, with an estimated 38 billion barrels of oil in place (daily production of 200,000+ barrels). The Lead operator developed the field together with JV partners. The project has undergone a revamp of brownfield installations as well as substantial development of greenfield oil processing facilities and new wells.

The development was a pathfinder for the lead operator’s integrated engineering environment, using Hexagon PPM’s tool suite in Intergraph Smart® Cloud. In addition, the project utilizes an on-premise EDW (data warehouse), using a standalone SmartPlant® Foundation (SPF) / Intergraph Smart Data Validator (SDV) combination, which is used to load documents and data into the company’s on-premise document control (DC) system and its document management (DM) system, SharePoint.

The project determined to retire the integrated tool suite in the cloud and instead sought to make fuller use of the company’s evolving DMDC strategy, as well as leverage the information portal success that had been pioneered by a previous megaproject.

Business Benefits

Hexagon PPM provided a phased architectural approach for the project. Phase one delivered a rapid implementation of an information portal based on Fusion, SDV, and SmartPlant Interop (SPIOP).
Further phases were designed to move the on-premise EDW (SPF/SDV) into the cloud, based on the DMDC configuration as developed for the previous mega project. This phase integrates with the operational enterprise system and paves the way for the eventual retirement of the on-premise SharePoint and document control system.

- Fusion is used to capture documents, tags, and information from registers to ensure completeness and consistency of all engineering data.
- The platform for subsequent movement of the on-premise EDW into the cloud and retirement of on-premise applications ensures common data standards and systems.
- Configurations automatically ensure a standardized approach and adherence to the lead operator and international standards.

Future Plans

Phases architected for this project include:

- Rapid implementation of information portal based on Fusion, SDV, and SPIOP
- Move the on-premise EDW (SPF/SDV) onto Intergraph Smart Cloud
- Upgrade the EDW to support DM and DC functions
- Integrate the DMDC into the cloud with the company’s operational SAP
- Migrate documents and data from existing DC and SharePoint systems into the Hexagon PPM DMDC

Smart Cloud for Operations

Intergraph Smart Cloud can help operators meet the challenges of quality, consistency, and maintaining the high value of data-centric systems for both large and small projects. The Smart Cloud environment can transition from project to operations faster and much more effectively by providing:

- Seamless handover from FEED to detail design
- Early access to common project plan, design data, and equipment data
- More efficient procurement and economies of scale
- Seamless handover to commissioning, startup, and handover

About Hexagon

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Hexagon’s PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.9bn EUR. Learn more at hexagon.com and follow us @HexagonAB.