James Fisher and Sons plc

Pioneering Sustainably





case study

Digital transformation in Indonesia's Oil & Gas Sector: An R2S Success Story

James Fisher AIS successfully deliver comprehensive digital twin model to upstream oil and gas company.

LOCATION: INDONESIA



START / END DATE: APRIL - MAY 2024

Our solution

An upstream oil and gas company in Indonesia developed its own digital twin application using reality data and 3D models that integrated with their Document Management System (DMS).

Recognising the need to build on their existing solution, they engaged JF AIS with the goal of combining point cloud data and critical information systems, such as the Computerised Maintenance Management Systems (CMMS) and IoT dashboarding tools, to access deeper operational insights.

The challenge

AlS worked closely with the company, offering expertise in managing and organising their data. By updating their existing digital twin to the R2S digital twin application, AlS provided a deeper understanding of handling operational reality data, engineering data, and project data effectively.

- Defined KPIs using design thinking methodology to maximise the benefits of the project
- Connected R2S to critical systems like CMMS and IoT dashboards, leading to more effective management
- Developed a sensor dashboard to help reduce downtime and improve safety, and a maintenance cost dash board to enable cost-effective maintenance strategies

Our impact

Within 20 days, the R2S digital twin application delivered a unified model that seamlessly integrated reality data, engineering data, and project-related data into a single platform.

- Transformed operations by providing remote access to all relevant asset information.
- Significantly enhanced project planning and execution
- Improved asset visualisation alongside data layers such as point clouds, CMMS information, and IoT data, all within a single platform
- Provided seamless connection to critical data, enabling more precise measurement of efficiency gains