



Case Study

Innovation in Action:

R2S and the Future of Anomaly Management

Background

Our client is a prominent player in the oil and gas industry, specializing in offshore operations. They operate an FPSO stationed, offshore Ivory Coast. The remote location of this asset presents unique challenges, with personnel and contractors often enduring long transfers to reach the location. The FPSO is subject to high temperatures and humidity, which significantly impact the structural integrity of the vessel, leading to increased corrosion and operational challenges. Therefore, the ongoing maintenance and integrity of the asset are critical for optimal performance and longevity.

The client is committed to achieving the highest standards of safety, efficiency, and productivity while overcoming environmental and logistical obstacles faced in the region. They embrace innovation, leverage cutting-edge technologies, and implement solutions to address these challenges continuously.

Challenge

The client aimed to improve the efficiency of their anomaly management processes. They identified the advantages of having their FPSO accessible on the R2S platform, such as reducing the number of information requests to the offshore team. The integrity manager relies on R2S to review inspection reports but required a broader view of the inspection location.

With R2S, the manager could "explore the site" with ease and gain better understanding. The Integrity team realized that R2S could become a valuable component of the wider integrity management process and ultimately move them forward in achieving greater efficiency.

Solution

In collaboration with AIS, the client optimized anomaly management processes using their existing R2S application. They developed a visually interactive map of anomalies, seamlessly integrating them as an additional layer of data on general arrangement drawings and 360 imagery. This approach empowered the integrity team to explore anomaly data from a new viewpoint, enhancing planning and execution workflows.

Over 90% of all anomalies registered within the third-party IFS system were seamlessly integrated and tagged into R2S. These anomalies were accurately placed in their designated locations on the vessel using XYZ platform coordinates and enabling rapid access to relevant metadata associated with each anomaly.

To maximize usability and customization, every anomaly tag was equipped with a distinct icon, representing criticality levels and the desired completion date. This ensured that users could easily identify and prioritize anomalies based on their unique characteristics, promoting flexibility and integration into their workflow.

Result

The implementation of the solution led to significant improvements in asset integrity, providing the client with improved visibility and control of their assets. Clear anomaly visualization enabled the prompt identification of critical issues, proactive maintenance strategies, and minimized downtime.

The client achieved their goal of enhancing anomaly management processes by leveraging R2S capabilities to prioritize maintenance activities resulting in improved efficiency, reduced travel, and informed decision-making.

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Summary

In summary, the client's collaboration with AIS delivered significant value, enabling innovation and technology-driven solutions to overcome challenges as they arise.

The solution developed for visualizing the locations of the existing anomalies led to remarkable improvements in asset integrity, safety, and operational efficiency. As a result, our client can now focus on their core business and confidently operate in a constantly evolving offshore environment, knowing that they can manage their assets proactively.

