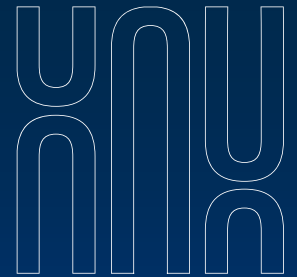


CASE STUDY



REVOLUTIONIZING AUTONOMOUS **WELL OPERATIONS WITH ROBOWELL**

CHALLENGE

1. How to minimize well and facility instability, as well as trips, which can disrupt operations significantly, leading to costly downtime and reduced production output.
2. Lack of continuous operational optimization in response to dynamically changing field conditions, potentially increasing costs.
3. Absence of real-time data availability from various sensors and monitoring systems to provide valuable insights into the current status of wells and facilities.

SOLUTION

RoboWell is a pioneering artificial intelligence (AI) autonomous well-control solution. It utilizes cloud-based AI algorithms to autonomously operate wells that self-adjust according to changing conditions, enhancing safe well operation. This leads to the improvement of efficiency, reducing the need for travel and physical interventions, and supporting the minimization of emissions.

The tool, which is developed in collaboration with Halliburton, has been deployed across an initial 10 wells at ADNOC's NASR offshore field, which is fully digital and uses a suite of technologies to maximize production and minimize emissions. RoboWell is set for further deployment at over 300 wells across ADNOC's offshore and onshore operations in 2024.

CLIENT TESTIMONIAL

The offshore deployment of RoboWell at NASR field demonstrates how ADNOC is harnessing the power of AI as we responsibly meet growing global energy demand. ADNOC's aim is to become the world's most AI-enabled energy company, integrating AI from the control room to the board room to maximize efficiency and move towards autonomous operations. Through our partnership with AIQ, we are leveraging the UAE's world-leading expertise in energy and AI to help transform the future of energy.

Abdulmunim Saif Al Kindy
ADNOC Upstream Executive Director

IMPACT



EFFICIENCY MAXIMIZATION

- Maintains wells flowing at a target rate, regardless of backpressure changes
- Simplifies well management workload by production operators
- Drives up to 5% production increase from existing wells



PEOPLE ENABLEMENT

- Minimizes the asset's time spent on non-value-added tasks
- Facilitates tight-knit collaboration and knowledge-sharing among cross-functional teams



PROFITABILITY MAXIMIZATION

- Optimizes gas lift requirements and drives up to 30% optimization in gas lift consumption
- Maintains well operations within the desired operating parameters