

FENNEX

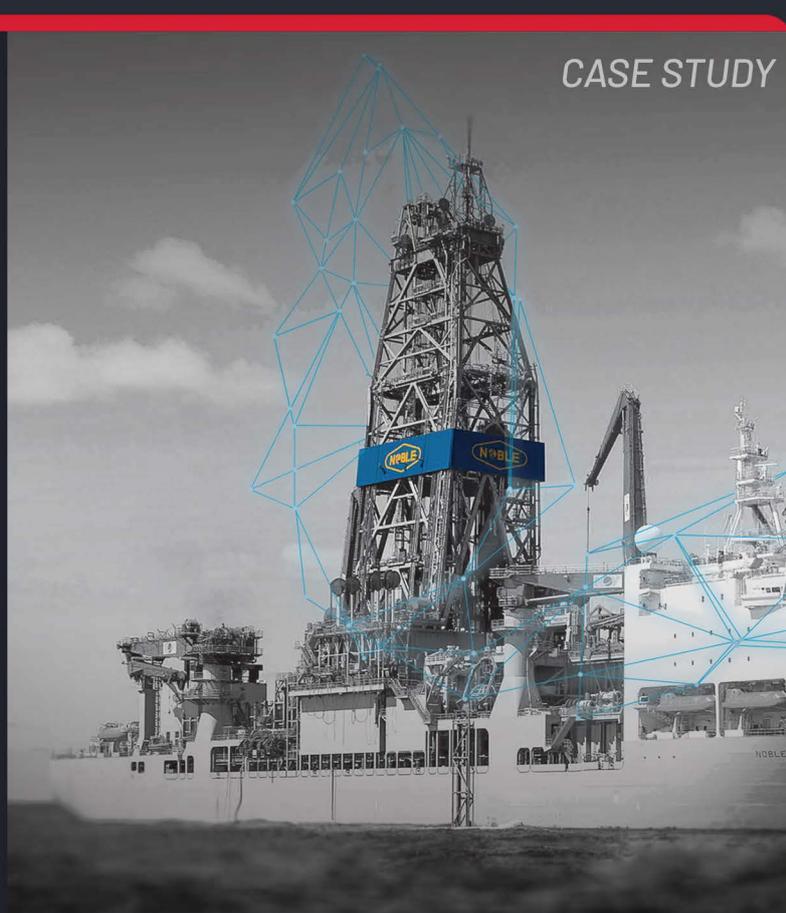
CASE STUDY

BEHAVIOUR BASED SAFETY SOLUTION

DIGITAL SOLUTION BBSS™

An industry-first digital solution transforms a critical HSE program for a leading offshore drilling contractor

NOBLE CORPORATION



AT A GLANCE

Who: Noble Drilling, Offshore Drilling Contractor

When: 2020

Scope: Digital solution combining artificial intelligence (AI) and machine learning (ML), optimising the safety observation program across a global fleet.

BBSS™ increased engagement by **30%**, reduced program cost by **70%** and saved **15,000** man-hours per year.

INTRODUCTION

Through successful collaboration with Noble Corporation, Fennex developed an industry-first cloud-based digital solution (**BBSS™**), combining advanced artificial intelligence and machine learning technologies to optimise the safety observation program across a global offshore fleet.

The previous, inefficient workflow involving manual entries from paper cards and time-lagging forms and reports was transformed into an efficient, automated system - with real-time analytics and live transparent dashboards of critical safety indicators to aid decision making and improve operational performance.

The **BBSS™** has been successfully developed and deployed across the global fleet in just 12 weeks, delivering significant efficiencies.

CHALLENGES

Behavioural based safety observation programs are designed to improve workplace safety culture by encouraging employees to practise safe behaviour, whilst recognising and mitigating risks.

However, existing methods to execute the safety observation program are becoming increasingly burdensome, time-consuming and inefficient, relying on data collection using paper cards, with manual entries to generate reports and spreadsheets that are then stored and shared for updates and analysis; turning most safety data trends into lagging indicators.

The Noble Corporation team identified an opportunity to leverage digital technology to optimise the safety observation program across their offshore and onshore locations, however, no appropriate solution was readily available. Many digital solutions fail to address industry-specific challenges and the increasing complexity of the rigorous safety management processes have made the effective application of data-driven technologies significantly harder.

Additionally, for organisations with varying levels of digital readiness across diverse global operations, leaders are more cautious to implement solutions that are not fit for purpose and at risk of jeopardising the consistent execution of the critical HSE program.

SOLUTION

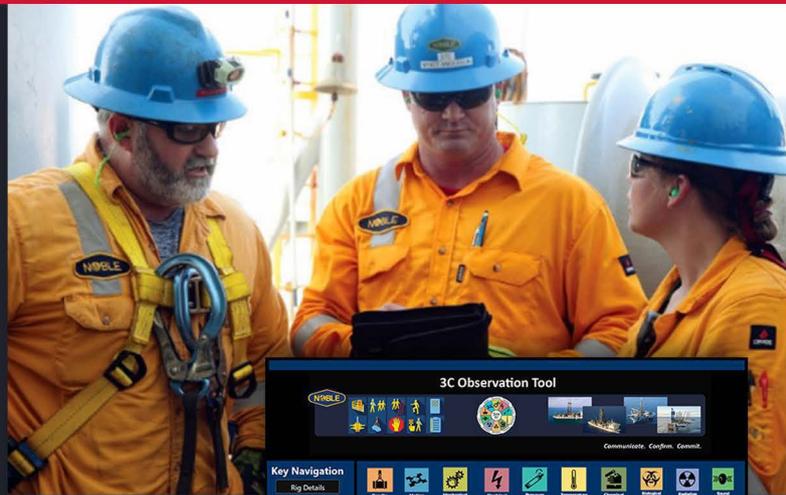
Through successful collaboration with the Noble Corporation IT and HSE teams, Fennex specialists developed a cloud-based intuitive digital solution, leveraging **artificial intelligence** and **machine learning** technology to fully digitise and automate the safety observation process across their global fleet, delivering a powerful central platform to easily capture, track, report and analyse critical safety trends.

To allow for varying levels of digital readiness across a **diverse global workforce**, the **BBSS™** solution uniquely combines physical and digital forms of safety observation inputs into an automated live streaming cloud data platform; via mobile Apps using smartphone or tablet, web-based access from PC and paper-based cards - providing the foundations of an **all-inclusive solution**.

By scanning the **QR code** unique to the location or offshore installation, all employees, including customers and third-parties, can submit a safety observation through a secure access using a mobile tool **in seconds**. All mobile Apps are designed with offline capabilities, so at-risk or unsafe conditions can be reported anywhere at any time.

Additionally, paper cards were designed for automated digital conversion using unsupervised machine learning algorithms, ensuring **full adoption** and seamless global deployment, regardless of digital readiness or location of operations.

To unlock further collaboration capabilities, the **BBSS™** is designed to digest safety observation inputs in the user's first language before translating to English from **30+ languages**: creating a powerful safety reporting tool across international teams, helping to reduce cultural barriers and **maximise engagement**.



RESULTS

In just 12 weeks, **BBSS™** has been developed and successfully deployed across twenty offshore assets, reinvigorating the corporate safety observation program across Noble's workforce, transforming their global operational visibility with real-time analytics and live transparent dashboards detailing critical safety trends and indicators.

Hailed as ground-breaking by the Noble team, the **BBSS™** digital solution ticked crucial boxes in improving safety culture, delivering significant efficiencies and reducing environmental impact:

- ✓ **Engagement:** boosted participation in safety reporting by **30%**.
- ✓ **Speed:** data and analysis enables deeper insights, leading to **quicker decision making** to mitigate risks and prevent hazards.
- ✓ **Sustainability:** **500,000** paper cards eliminated each year.
- ✓ **Efficiency:** cut program overall cost by **70%** and saved **15,000** man-hours each year.

"Having such an innovative tool that works for our offshore teams, customers and contractors is a significant asset and an advantage for any high-hazard industry."

- HSE Director, Noble Corporation

FENNEX LTD
2nd Floor, 40 Union Terrace,
Aberdeen, AB10 1NP

T: (+44) 1224 611833
E: info@fennex.net

www.fennex.net