

# Smart Safety & Incident Compliance Automation for Oil & Gas Company



## Challenge

A leading oil & gas operator faced operational delays and safety risks

- Limited access to SOPs and procedural manuals in remote field sites led to delays and safety risks.
- Manual, reactive approach to handling abnormal equipment behavior (e.g., temp/pressure/vibration), often leading to delays in identification of risk incidents and repair work
- Lack of real-time integration between sensors' data, work orders, and procedures impacted compliance and uptime.

## Approach

- Completed POC using LLMs/NLP/Advanced Analytics to surface repair procedures from technician queries and detect anomalies from equipment data being pulled from Scada system.
- Flagged risks with equipments/machinies at facilities (e.g., gas processing plants) and generated automated work orders.
- Deployed technician checklists with digital signoff and delivered compliance dashboard for incident tracking and adherence scoring.

## Key Results

**50-60%**

reduction in incident response time

## Objectives

Provide field technicians with mobile/web access to context-specific technical procedures and safety protocols. Automate detection of abnormal equipment conditions and trigger actionable workflows. Leverage AI/LLMs to surface the right procedures and recommendations instantly.

## Solution

- Straive developed a safety & compliance automation platform that blends real-time IoT monitoring, AI/LLM-powered document intelligence, and workflow automation.
- Supervisors are instantly able to generate workorders, technicians receive immediate access to step-by-step procedures via AI-powered solution with contextual accuracy —reducing response times and improving safety compliance across the enterprise.
- End-to-end traceability from incident to resolution .

**500+**

field assets to be covered by project completion

## About Straive

As a data analytics and AI operationalization company, we don't just build top-tier data analytics and AI solutions—we integrate them seamlessly into your core workflows. This approach drives enhanced efficiency, improves user experience, and boosts revenue, setting you apart from the competition. Serving a diverse range of industries—including Pharmaceutical & Life Sciences, Logistics, Supply Chain & Manufacturing, Research & Publishing, Information Services, EdTech, Banking & Financial services, and Retail Tech, Entertainment & Media—we have a global client base spanning over 30 countries. Our strategically positioned resource pool operates across seven countries, including the Philippines, India, the United States, Nicaragua, Vietnam, the United Kingdom, and Singapore, where the company is headquartered.