Transforming Rig Site Inspection and Maintenance with Augmented Reality

Overview

A pioneer firm, which is a diversified and integrated group of energy companies, and the 12th largest oil company by production, could reduce mean time-to-repair at their rig sites by 30% and increase remote resolution rate by 40% with the support and solution provided by Tech Mahindra. Combining augmented reality (AR) and smart glasses along with our remote expert support and teleservice interactions, we were able to remotely resolve 50% of the maintenance and inspection issues at rig sites.

Client Background and Challenge

The client is a diversified and integrated group of energy companies - the twelfth largest oil company by production. The major challenge for this energy firm were to quick and efficiently navigate and solve for the issues and problems that usually arise in rig sites. The rig site service technicians were dependent on remote experts to resolve maintenance and inspection issues that arose during huge installation pumps. This led to downtime and major cost implications.
Our Approach and Solution

Tech Mahindra offered remote expert support, teleservice and interactions, and the use of our AR solution and smart glasses to connect the technician to expert in real-time and get assistance and/or guidance when they needed. Our solution also included:

- Step by step inspection, maintenance AR workflow including videos, drawings, audio cues to assist onsite technician
- Collation of all data by onsite technicians for automated installation or maintenance report generation

Business and Community Impact

The primary concern of downtime and dependency were drastically shrunk leading to a smooth workflow and increased production.

Up to 50% of the issues solved remotely by expert engineers which reduced the mean time repair by 30%. Dependency issues have also been addressed by providing on-the-job training for onsite technicians.

To know more, reach us at vbuoilandgas@techmahindra.com