

Global EPC contractor streamlines on-site employee data through Emergency Response System for successful evacuation during emergencies



The challenge

The safety of the Global Engineering Procurement and Construction (EPC) contractor was constantly threatened by factors such as sabotage/terrorist attacks, political instability/upheavals and natural disasters e.g. earthquake, cyclones, fire at oil rigs etc. For such eventualities, it was therefore important to establish efficient, speedy and seamless emergency rescue operations whose success heavily hinge upon the existence of accurate basic employee information of onsite staff.

Under normal operations, the centralized HR department located in the UAE was adept at managing all employee related activities through a PMO, however, under emergency situations, the onus falls on the Emergency Response Team (ERT) to carry out safe and efficient evacuations of onshore employees.

The major challenges faced by the ERT were:

- Safety risk of onsite rig workers.
- Absence of an accurate record of onsite and evacuated staff leading to faulty verification of this staff category.
- Inefficient system of regular and timely updates of employee records.
- Ineffective Emergency Response Management Systems for large oil/gas or petrochemical operating companies.
- Absence of an operative checklist for tracking employees working onboard.
- Obsolete manual tracking mechanisms.

The above necessitated the development of the Emergency Response Management Solution with the following features:

- Tracks the off-shore evacuated workforce efficiently during emergency situations or disasters.
- Monitors accurate data of rescue operations and maintains a corresponding synced off-shore repository for data retrieval at any location.
- Verifies and validates on-site workers in real-time.
- Ensures integrity of business continuity management systems.

The solution

Under emergency situations, off shore sites are fraught with grave instabilities which emergency response crew may be ill-prepared for in view of the knowledge gaps and other unforeseen events.

However, such conditions require high level collaboration between the ERT and the exploration companies, to ensure optimal safety levels for all stakeholders such as fire departments, emergency medical services, the Police and emergency management agencies with direct emergency responsibilities for the remote areas selected for the exploration activities under view.

In view of the foregoing, ISON Technologies implemented the Emergency Response System (ERS) Solution; an intelligent, end-to-end automated mobile offering that captures employee information such as Employees' ID details, Personal bio-data, Photograph, Proof of Identity (POI) & Biometric Fingerprints, as required by the business and uses this information to create a detailed Manifest of on-rig evacuated employees, which is verified & regularly updated on the centralized HRMS System.

The Smart ERS Solution has the following components:

- Rugged Custom built TABLET with an integrated Camera and readers for Biometric, Smart Card and Passport information
- GPS to track devices
- Battery for Local storage Device
- Evacuation checklist & procedures
- Printer
- Mobile application to capture employee details and integrate same with back-end HRMS and other IT systems
- Service desk to manage all client issues



The benefits

- **Automated and Seamlessly Integrated Process:** Single, synced application for capturing & tracking employee's information digitally through TABLET devices in a faster, convenient, automated and more effective manner. Integration with central HRMS and other backend systems facilitates efficient capture, tracking and update of valid on - rig employee information, allowing for faster & effective retrieval at any location under emergency situations.
- **Offline /Local Storage & Response:** During crisis and in areas with limited data connectivity, an updated copy of employee information is captured and stored on the Device and can be retrieved instantly.
- **Effective Normalization:** Previously, 90% application data were non-normalized. With ISON's ERS Solution it is 100% normalized, as all data is electronically captured, due to configurable application which allows data capture from multiple sources – Employee Id, MRZ, SmartCard, RFID etc.
- **End-To-End Solution:** From the integrated Tablet, software application to systems integration and support.