

CASE STUDY



MATERIALS
MANAGEMENT



Location
UK

Development of a retail materials management model for Equinor

REAL-TIME MATERIAL VISIBILITY

THE NEED

Transforming Equinor's materials management operation to a retail industry standard.

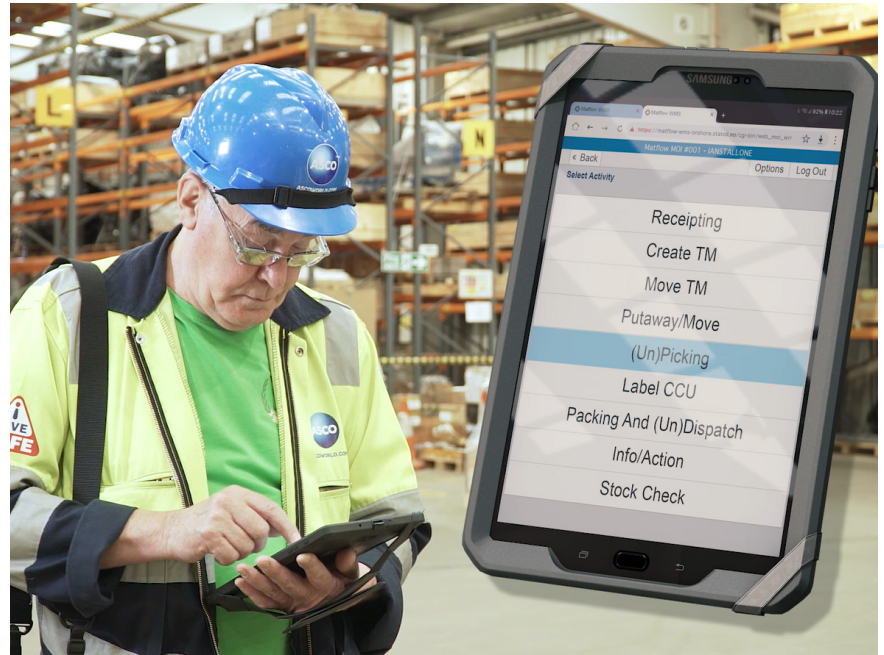
THE SOLUTION

Designed, developed and implemented our Integrated Materials Management System (IMMS) for the Oil and Gas.

THE BENEFITS

From our experience materials management is a critical part for the success of running operations. Delivering full material visibility, control and data about the materials consumption can save millions in inventory, capital spend, consumption and drive up supply integrity. As well as reducing transaction costs for processing materials and contributing toward improving and sustaining higher offshore up times.

- Full cradle to grave material traceability
- Improved control and process efficiency
- Enhanced safety management and controls
- Reduced client material consumption and capital spend
- Improved supplier integrity
- 70% improved end to end efficiency compared to industry peers
- The work execution system is easy to use, mobile on a tablet and intuitive, reducing training from weeks to hours.
- The work execution system drives up efficiency by a factor of four and reduces errors.
- No change in our client's IT infrastructure



THE NEED

Transforming Equinor's materials management operation to a retail industry standard with a three-fold goal.

1. Provide complete materials visibility onshore and offshore which tracks all materials from supplier to offshore and back to onshore and on for repair, including capability for maintenance, operations, drilling and projects.
2. Provide a breakthrough industry specific materials management system built from best in class practice from retail and not seen in Oil and Gas before. This would be used in the warehouse, offshore and with supplier. Functionality for auto-identification, auto-routing, product photos, live reporting, customs, multipart management, auto-kitting, auto-staging, auto-replenishment, automatic returns routing and instructions and automatic process control through in-built AI would be developed.
3. Set up a work execution system that is easy to use, intuitive, mobile on a tablet and, drives up efficiency. Stock checks to be completed in a day.

CASE STUDY



MATERIALS MANAGEMENT



METHOD

Building a retail materials management model

In collaboration with our client, ASCO used our lean six-sigma experience to identify operational challenges. Many of these challenges were due to a lack of process control and poor work execution due to the inflexibility of their ERP system, lack of business process and manual administration.

Based on an analysis of these challenges and adopting best practice from other industries, ASCO built a business and process architecture to support best in class practice. Using an existing retail system, we extended and developed our integrated materials management system (IMMS) for Oil and Gas. The IMMS is completely integrated into our client's ERP system, providing greater operational functionality, live updating, increased usability, improved operational control and increased material visibility.

The IMMS has a wide range of functionality for materials management including;

- Auto-processing and Artificial Intelligence (AI) to drive processes
- Barcoding and RFID tagging functionality
- Energy specific functionality to auto-route material
- Returns management
- Material attribute management including expiry and preservation dates
- Multi-part part management for service kits and sets of equipment
- Auto-kitting and staging with work pack management

RESULTS

Dramatically reduced material processing time

The warehouse deployment shows major improvements, with the time to complete a receipt reducing from 26 to 3 minutes. The IMMS platform is intuitive and quick to learn (staff training was complete in less than a day) and is easy to use as it eliminates the need to use ERP systems. IMMS instructs the users what to do and AI drives process control, resulting in improving work efficiency by over 80%.

As the business processes were streamlined and formalised through the deployment of the IMMS, processing time reduced, labour cost savings were made, and personnel were able to focus on value adding activities. With the increased visibility and integrity of material supply, this has influenced our wider client's operation as material visibility allows greater planning accuracy and control.

PERFORMANCE BEFORE AND AFTER THE PROJECT SHOWS:



88% FASTER
THAN PREVIOUS SAP
RECEIPTING SYSTEM



PACKING TIME
IMPROVED **85%**



CCU DISPATCH TIME
REDUCED **54%**



KITTING MATERIAL
46% FASTER



STOCK CHECKING
44% FASTER