**STORY**

- **Summary:** The Offshore Installation Manager needs a solution to monitor the safety key performance indicators without the need of losing time in entering the data collected in the equipment inspections, so he can focus on prevention and training.

- **Storyline:** The Offshore Installation Manager is interested in monitoring processes and activities on line and in mobile way to release his time for better root cause analysis and prevention of accidents. For him, having on line readings on all platform equipment, which can cause an accident, is critical to protect the life and welfare of the platform personnel.

**POINT OF VIEW**

As Offshore Installation Manager

I need a way to monitor processes, personnel and machines on-line.

so that I can prevent accident and minimize the consequence of any error or hazardous event.
James

My passion is to ensure the oil rig is performing safely and efficiently. I like to see my co-workers greeting me because they know I’m looking after them.

- 50, married, mechanical engineer
- Always focused on the Control Room
- Need to review all corners of the platform by myself
- I’m in permanent contact with technicians and suppliers to guarantee a perfect maintenance

Responsibilities

- Health, Safety, Security and Welfare of all personnel
- Operation of the vessel
- Maintaining operational records

Main Goals

- Take proper actions to avoid or minimize potential damages or losses, with special regards to life
- Keep the safety and integrity of the vessel and the safety and discipline of the persons on board

Needs

- Monitor the process performance to ensure that process safety risks are under control
- Monitor the vessel activities and ensure the health and safety procedure are followed consistently by the personnel
- Keep the governance, risk and compliancy documentation up to date

Pain Points

- When I am in the Control Room updating documents, it is difficult to keep the attention on monitoring the processes and machines indicators
- When I am in the routine inspections, I need to take note of the indicators and cannot process them on-line
- I cannot be all the time everywhere to prevent accidents or take the opportune actions on time.
# USER EXPERIENCE JOURNEY

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>MINDSET</th>
<th>FEELING</th>
<th>TOUCH POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily coordination meeting preparation</td>
<td>Oh, too many maintenance records, check spare parts inventory, approve service orders!</td>
<td>😞 It is good to have SAP with all integrated</td>
<td>SAP PM, IM and CS modules Machines and process readings taken manually and summarized in Excel dashboard</td>
</tr>
<tr>
<td>Coordination meeting</td>
<td>Again all these lagging indicators!</td>
<td>😞 I enjoy coaching people and sharing experiences</td>
<td>SAP Desktop, projector, Skype for Business</td>
</tr>
<tr>
<td>Health and Safety reporting review</td>
<td>This root-cause analysis is not completed!!</td>
<td>😞 Unfortunately, SAP is not recording machines and process indicators</td>
<td>Document management system</td>
</tr>
<tr>
<td>Training course</td>
<td>Education, practice and discipline are critical for preventing accidents</td>
<td>😞 If some malfunction is happening right now we are 12 hours late to fix it</td>
<td>Virtual training room, eLearning platform</td>
</tr>
<tr>
<td>Routine inspection and indicators data entry</td>
<td>I need to do it myself, I am the only one qualified to interpret them</td>
<td>😞 We cannot process all the information to predict a failure</td>
<td>Paper forms, hand notes, Excel</td>
</tr>
<tr>
<td>Monitoring in the Control Room</td>
<td>All the other stuff does not allow me to focus on my main function</td>
<td>😞 Uff, the data collection takes too much effort</td>
<td>Monitors screens, radio, platform handy communicator</td>
</tr>
</tbody>
</table>

- **FEELING**
  - 😞 It is good to have SAP with all integrated
  - 😞 I enjoy coaching people and sharing experiences

- **TOUCH POINTS**
  - SAP PM, IM and CS modules Machines and process readings taken manually and summarized in Excel dashboard
  - SAP Desktop, projector, Skype for Business
  - Document management system
  - Virtual training room, eLearning platform
  - Paper forms, hand notes, Excel
  - Monitors screens, radio, platform handy communicator
The overview page provides the main KPIs required for monitoring the equipment, the incidents and the costs.

If we select the equipment name we can navigate to the List Reports containing the sensors readings and further to the Equipment information page.

If we select the Incident KPI we can navigate to the Root Cause Analysis screen.

**Piper North Sea Control Room**

**Equipment Safety Indicators**
- **Submersible Pump**: Peter Black, 1000 A001, 13.10.2016, 90 %
- **Electric Equipment Module**: John First, 1000 YY708, 15.10.2016, 99 %
- **Gas Compressor**: Mike Rad, 1000 TY256, 23.09.2016, 35 %

Showing 3 of 4

**Incidents Indicators**
- **October 2016**
  - **1** Deseased
  - **2** 0.00 %

**Costs distribution**
- **October 2016**
  - **7056** KEUR
  - Budget 5000 KEUR, 41.12 %
The List Report provides the on-line results from the equipment sensors readings done every 10 minutes. The report shows the readings where there are alarms triggered by the inlet or outlet pressure. The performance deviations column shows the readings which indicates that the actual flow rate is significantly below the target flow rate.

If we select the backward arrow we can navigate to the overview page.

If we double click on any reading with alarm we can navigate to the equipment information to request a repair or a service.
The Equipment information page gives access to drawings and designs of the equipment.

If we click on the Spare Parts Icon Tab we are able to search information about the parts we may need to buy or repair to keep the equipment in the desired performance levels. It also provides information about the procurement lead time, price, stock, next preventive maintenance date, etc.

If we click on the Requests Icon Tab we are able to create a Request for Repair including the specification of the parts required and the hours of labor necessary to fix the problem.

If we click on the backward arrow we are able to return to the List Report page.
The Root Cause Analysis page gives access to the records of every incident with mention of the main indicators such as injuries and casualties. It also provides information about cause effect relation and the sequence of the events which ended up in a diseased worker.

In the footer the Offshore Installation Manager can provide approval and/or submit the report by email to get additional information or share his opinion with other collaborators.

If we click on the backward arrow, we are able to return to the List Report page.