



open**SAP**

TOUCH IOT WITH SAP LEONARDO PROTOTYPE CHALLENGE

T LAKSHMANAN

05/07/2017



Story

Petroleum products are transported from one location to another by different modes which include pipelines, rail, shipping, and trucking.

The most commonly used form of oil transportation is through pipelines. Pipelines are typically used to transport highly flammable products like petrol, diesel and kerosene in the same pipeline. Pipelines require significantly less energy to operate than trucks or rail and have a lower carbon footprint.

Industry: Oil and Gas

Sensor enabled devices are used to identify leak and theft in the pipeline, Real time monitoring of the product/batch arriving at particular locations, Automated Scheduling of the multiple products at the start location based on the availability of products in the tanker and demand in that particular location.

Pipeline Flow, Pressure and Temperature are used as the basis for the above model.



Persona



Laksh

Operations Manager

“I need to stay in control of entire pipeline, since I have ultimate responsibility for entire operations”

About

- 39 Years old and Married. 2 Children. 4 years of Pipeline Operations experience.
- Being overall responsible, I need to have dashboard of the entire pipeline.
- Most of the time stuck in the control room
- Work closely with Portfolio Manager, Operations Manager, Technicians, and Admins to run the pipeline operations as efficient and safe as possible.

Responsibilities

- Ultimate responsibility of entire pipeline operations
- Accountable for profit
- Safety of co-workers
- Meet the daily downstream of oil demand

Main Goals

- To Maximize the operational Efficiency
- Monitor system pressure at critical locations
- Be safe and reduce downtime of operations by evaluating, inspecting and repairing assets

Needs

- Graphical view of the batch/product with different colors
- Cockpit view to bring all the critical decision making information in the cloud

Pain Points

- Need to stay in control room
- Many screens needed to monitor critical parameters of different locations
- Difficult to identify and locate the theft.
- Critical decisions are made based on siloed information and data.



Point of View (PoV)


As a operation Manager for Pipeline Operations

I **need** cockpit view to bring all the critical decision making information in the cloud

So that I always can be in control and take necessary actions as soon as unforeseen event occurs.



UX Journey

ACTIONS	<ul style="list-style-type: none"> - Comes to office in the morning - Go to Control Room Immediately 	<ul style="list-style-type: none"> - Decides to check pipelines status 	<ul style="list-style-type: none"> - Tries to call other operations manager at different location on inter-com system 	<ul style="list-style-type: none"> - Decides to check Temperature/density of the tanker/Oil 	<ul style="list-style-type: none"> - Busy checking different screens for any alarm and monitoring the batch is moving smoothly to other locations 	<ul style="list-style-type: none"> - Picking a call from other operation managers from different locations
MINDSET	<ul style="list-style-type: none"> - Have a cup of coffee - What is my priority today? - Need to Check multiple screens 	<ul style="list-style-type: none"> - Why batch is not scheduled today? 	<ul style="list-style-type: none"> - Hope I can reach him and he is not busy - yes he is answering and confirms all is OK 	<ul style="list-style-type: none"> - hmm, need to climb top of the tanker to note down reading - This will take some time 	<ul style="list-style-type: none"> - I am so bored of going through the same process every morning - At least good everything is going smoothly. 	<ul style="list-style-type: none"> - There is potential issue at that locations. - I need to wait for further updates - Why was there is no alert?
FEELING						
TOUCH POINTS	<ul style="list-style-type: none"> - Multiple Screens in central control room 	<ul style="list-style-type: none"> - Old mainframe based applications 	<ul style="list-style-type: none"> Operation Manager 	<ul style="list-style-type: none"> Product/Asset Status 	<ul style="list-style-type: none"> Pipeline status 	<ul style="list-style-type: none"> Operation Manager



Prototype

Prototype screens for an IoT application

Link to Low-Fidelity Interactive Mockup:

<https://standard.build.me/user-research/268b5d3d7860abdc0e20694f/participant/f7799dac099e28d50e20967b>

